

## UNDERSTANDING TRANSISTORS

All transistors registered with the Electronic Industries Association of Japan (EIAJ) are assigned an "S" number. The number consists of 5 elements,

### ELEMENT 1

This number indicates the number of active internal or external connections minus one.

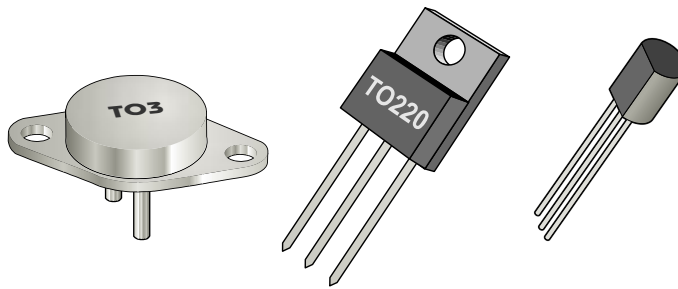
### ELEMENT 2

Originally indicated that this device was registered with EIAJ, although now it is not the case.

### ELEMENT 3

Polarity and applications.

- A PNP High Frequency
- B PNP Low Frequency
- C NPN High Frequency
- D NPN Low Frequency
- J P Channel F E T
- K N Channel F E T



|                   |          |          |          |             |          |
|-------------------|----------|----------|----------|-------------|----------|
| <b>TRANSISTOR</b> | <b>2</b> | <b>S</b> | <b>C</b> | <b>1413</b> | <b>A</b> |
| <b>ELEMENT</b>    | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b>    | <b>5</b> |

### ELEMENT 4

Serial number, in order of registration.

### ELEMENT 5

Suffixes indicate improvements and their sequence.

- A = First improvement
- B = Second improvement, etc

NOTE: An improved version will replace an unimproved type in all cases, but an unimproved version will not always replace an improved type.



## NON JAPANESE TRANSISTORS

Many manufacturers in Korea, Taiwan etc have adopted similar numbers to the Japanese and change the prefix eg KSC945. To make things more confusing, the KS is left off the device therefore C945 is the only marking on the transistor. In most cases the specs are similar but pin outs are not. Please check circuit prior to replacing transistor, the same number does not always mean that pin outs are the same.

## TRANSISTOR SUBSTITUTIONS

Wagner Electronics reserves the right to supply a substitution transistor where the original is not available or is out of stock. A transistor substitution manual is available which lists possible substitutions. The comparison is on similar specs only. Therefore this should be read in conjunction with the Transistor Manual to ensure that cases and pin-outs are the same and that the transistor with the best specs is chosen. See section 2 for a comprehensive list of all TECHNICAL MANUALS AVAILABLE.

## INTEGRATED CIRCUITS SUBSTITUTES

Generally speaking, integrated circuits are difficult to substitute. In cases where there are substitutes that we are aware of and stock, both types will be listed and the same type will be supplied in both cases. Check the invoice for info if you receive a chip not identical to the one you ordered. If you discover a successful substitution, please let us know including all relevant details. Thank you.

### Improvements:

**JAPANESE** - An improved type will replace the original, eg. UPC1185H2 will replace UPC1185.

**NON-JAPANESE** - No set guidelines. \*\*\*\* IC MANUALS see SECTION 14 \*\*\*\*

### PLEASE NOTE

### STOCK AVAILABILITY

The transistors, IC's, FET's, etc.. listed are what we have available at the time of preparation for this catalogue. It is possible that by the time you receive this listing some items may no longer be available. Manufacturers tend to discontinue goods without prior warning.

### PRICE CHANGES

Once an item has been discontinued or there is a temporary shortage we must purchase from whoever has stock on the world market. Supply and demand will usually apply to these situations. We will continue to supply discontinued parts for as long as we are able to obtain them. The price may increase, but in most cases the repair will still be viable.

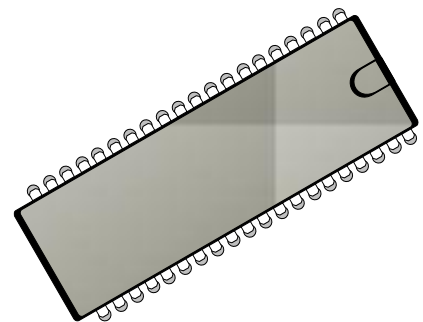
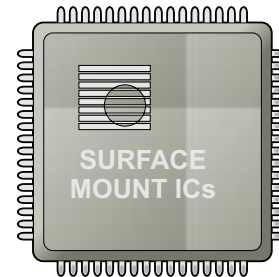
### SEMICONDUCTOR WARRANTY


Faults not correctly diagnosed or faults in other parts of the circuitry may result in a newly fitted device being damaged. Manufacturers stand by their quality control testing and DO NOT accept warranty claims on semiconductor devices.

### ITEMS NOT LISTED

If you require an item not listed please let us know. Maybe we have added it to our range since this publication or alternatively we can make enquires with our suppliers. If the part is available we will acquire it and add it to our range. Our extensive spare parts listing has come about because many of you have taken the time to inform us which parts you would like us to stock. When you contact us about items not listed, please supply us with as much information as you have available about the part. This will assist us in sourcing the part.

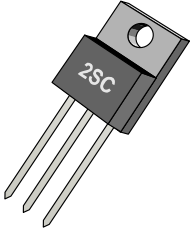
Thank You.



| TRANSISTORS<br>   | BD241C<br>BD242C<br>BD243C<br>BD244<br>BD244C<br>BD249C<br>BD433<br>BD434<br>BD435<br>BD436<br>BD437<br>BD438<br>BD439<br>BD440<br>BD441<br>BD442<br>BD535<br>BD536<br>BD538<br>BD643<br>BD644<br>BD645<br>BD646<br>BD647<br>BD648<br>BD649<br>BD650<br>BD651<br>BD652<br>BD675<br>BD676<br>BD677<br>BD678<br>BD679<br>BD680<br>BD681<br>BD682<br>BD683<br>BD711<br>BD712<br>BD908<br>BD911<br>BD912<br>BD941 | BF819<br>BF859A<br>BF869<br>BF870<br>BF871<br>BF872<br>BF960  | BU2532AL<br>BU2532D<br>BU2532DF<br>BU2708AF<br>BU2722AF.INSULATED<br>BU2727AF<br>BU4507AX   | DTA124EA<br>DTA124EF<br>DTA124ES<br>DTA124EU.S/FACE.MN<br>DTA143TS<br>DTA144EA   |
|---|---|---|---|--|
| AD149<br>AD162  | BD435<br>BD436<br>BD437<br>BD438<br>BD439<br>BD440<br>BD441<br>BD442<br>BD535<br>BD536<br>BD538<br>BD643<br>BD644<br>BD645<br>BD646<br>BD647<br>BD648<br>BD649<br>BD650<br>BD651<br>BD652<br>BD675<br>BD676<br>BD677<br>BD678<br>BD679<br>BD680<br>BD681<br>BD682<br>BD683<br>BD711<br>BD712<br>BD908<br>BD911<br>BD912<br>BD941  | BFQ162<br>BFQ225<br>BFQ232A<br>BFQ235A<br>BFQ252A<br>BFQ262   | BUH315D<br>BUH415DI<br>BUH515<br>BUH515D<br>BUH517<br>BUH715<br>BUH1015<br>BUH1015HI<br>BUH1215   | DTB114ES   |
| AF126<br>AF127<br>AF139<br>AF279  | BDV64C<br>BDV65B<br>BDV65BF.INSUL<br>BDV65C<br>BDV66AF.INSUL  | BFR90A<br>BFR91A  | BUK444-500B<br>BUK444-600B<br>BUK444-800B<br>BUK445-600B<br>BUK446-800<br>BUK453-50A<br>BUK455-500A<br>BUK455-600B<br>BUK456-60A<br>BUK456-800B<br>BUK456-1000B | DTC114EA<br>DTC114ES<br>DTC114YF<br>DTC114YK.S/FACE.MN<br>DTC124ES<br>DTC143EA<br>DTC143ES<br>DTC143TS<br>DTC143XS<br>DTC143XU.S/FACE.MN<br>DTC144ES<br>DTC144EU.S/FACE.MN<br>DTC144WU.S/FACE.MN |
| BC107<br>BC108<br>BC109<br>BC140<br>BC141<br>BC149<br>BC160<br>BC161<br>BC177<br>BC179<br>BC238<br>BC239<br>BC327<br>BC328<br>BC337<br>BC338<br>BC368<br>BC369<br>BC546B<br>BC546A<br>BC547A<br>BC547B<br>BC548<br>BC548B<br>BC548C<br>BC549<br>BC550<br>BC556<br>BC557A<br>BC557B<br>BC558<br>BC558C<br>BC559C<br>BC560C<br>BC635<br>BC636<br>BC637<br>BC638<br>BC639<br>BC640<br>BC848.S/FACE.MNT | BDV64C<br>BDV65B<br>BDV65BF.INSUL<br>BDV65C<br>BDV66AF.INSUL  | BFT66   | BUL310F1  | DTD114ES<br>DTD114TS<br>DTD123YS   |
| BC107<br>BC108<br>BC109<br>BC140<br>BC141<br>BC149<br>BC160<br>BC161<br>BC177<br>BC179<br>BC238<br>BC239<br>BC327<br>BC328<br>BC337<br>BC338<br>BC368<br>BC369<br>BC546B<br>BC546A<br>BC547A<br>BC547B<br>BC548<br>BC548B<br>BC548C<br>BC549<br>BC550<br>BC556<br>BC557A<br>BC557B<br>BC558<br>BC558C<br>BC559C<br>BC560C<br>BC635<br>BC636<br>BC637<br>BC638<br>BC639<br>BC640<br>BC848.S/FACE.MNT | BDW41B<br>BDW93C<br>BDW94C  | BFW16A  | BUT11A<br>BUT11AF<br>BUT11AX<br>BUT11F<br>BUT12A<br>BUT12AF<br>BUT18AF<br>BUT56A  | FS10SM-18A   |
| BC107<br>BC108<br>BC109<br>BC140<br>BC141<br>BC149<br>BC160<br>BC161<br>BC177<br>BC179<br>BC238<br>BC239<br>BC327<br>BC328<br>BC337<br>BC338<br>BC368<br>BC369<br>BC546B<br>BC546A<br>BC547A<br>BC547B<br>BC548<br>BC548B<br>BC548C<br>BC549<br>BC550<br>BC556<br>BC557A<br>BC557B<br>BC558<br>BC558C<br>BC559C<br>BC560C<br>BC635<br>BC636<br>BC637<br>BC638<br>BC639<br>BC640<br>BC848.S/FACE.MNT | BDX33C<br>BDX34C<br>BDX53C<br>BDX54C<br>BDX54F<br>BDX65A<br>BDX66A<br>BDX66C<br>BDX67C  | BFY50<br>BFY51<br>BFY52<br>BFY90  | BUV27H<br>BUV48A<br>BUV48B<br>BUV48C<br>BUV48CFI<br>BUV48FI<br>BUV90  | G60N90   |
| BCY59<br>BCY79  | BDX33C<br>BDX34C<br>BDX53C<br>BDX54C<br>BDX54F<br>BDX65A<br>BDX66A<br>BDX66C<br>BDX67C  | BS170   | BUW11A<br>BUW12A<br>BUW13A<br>BUW13AF<br>BUW84<br>BUW85   | IRF530N<br>IRF540<br>IRF620<br>IRF630<br>IRF634<br>IRF640<br>IRF730<br>IRF740<br>IRF822<br>IRF830<br>IRF840<br>IRF9530<br>IRF9540<br>IRF9610<br>IRF9620<br>IRF9630<br>IRF9640                    |
| BD115<br>BD135<br>BD136<br>BD137<br>BD138<br>BD139<br>BD140<br>BD175<br>BD176<br>BD177<br>BD179<br>BD180<br>BD201<br>BD202<br>BD204<br>BD229<br>BD232<br>BD233<br>BD234<br>BD235<br>BD236<br>BD237<br>BD238<br>BD239C<br>BD240C<br>BD241  | BDX33C<br>BDX34C<br>BDX53C<br>BDX54C<br>BDX54F<br>BDX65A<br>BDX66A<br>BDX66C<br>BDX67C  | BSS38   | BUX10<br>BUX48<br>BUX48A<br>BUX67C<br>BUX80<br>BUX81<br>BUX84<br>BUX84F<br>BUX85<br>BUX86<br>BUX98C   | IRFD110  |
| BD115<br>BD135<br>BD136<br>BD137<br>BD138<br>BD139<br>BD140<br>BD175<br>BD176<br>BD177<br>BD179<br>BD180<br>BD201<br>BD202<br>BD204<br>BD229<br>BD232<br>BD233<br>BD234<br>BD235<br>BD236<br>BD237<br>BD238<br>BD239C<br>BD240C<br>BD241  | BF180<br>BF183<br>BF198<br>BF199<br>BF200<br>BF240<br>BF245<br>BF258<br>BF259<br>BF324<br>BF337<br>BF338<br>BF370<br>BF421<br>BF422<br>BF423<br>BF458<br>BF459<br>BF469<br>BF470<br>BF472<br>BF494  | BSX20   | BUY69A  | IRFP240A<br>IRFP460<br>IRFPC40<br>IRFPC50<br>IRFPC60   |
| BD115<br>BD135<br>BD136<br>BD137<br>BD138<br>BD139<br>BD140<br>BD175<br>BD176<br>BD177<br>BD179<br>BD180<br>BD201<br>BD202<br>BD204<br>BD229<br>BD232<br>BD233<br>BD234<br>BD235<br>BD236<br>BD237<br>BD238<br>BD239C<br>BD240C<br>BD241  | BF180<br>BF183<br>BF198<br>BF199<br>BF200<br>BF240<br>BF245<br>BF258<br>BF259<br>BF324<br>BF337<br>BF338<br>BF370<br>BF421<br>BF422<br>BF423<br>BF458<br>BF459<br>BF469<br>BF470<br>BF472<br>BF494  | BU126<br>BU205<br>BU208A<br>BU208D<br>BU326A<br>BU406<br>BU406D<br>BU407<br>BU408<br>BU408D<br>BU415B<br>BU426A<br>BU426AF.INSULATED<br>BU505<br>BU508A<br>BU508AF.INSULATED<br>BU508D<br>BU508DF.INSULATED<br>BU508DW<br>BU526<br>BU606<br>BU608<br>BU626<br>BU705<br>BU806<br>BU807<br>BU808DFI<br>BU826<br>BU903<br>BU908<br>BU1508DX<br>BU2508A<br>BU2508AF.INSULATED<br>BU2508AX<br>BU2508D<br>BU2508DF.INSULATED<br>BU2508DX<br>BU2520A<br>BU2520AF<br>BU2520AX<br>BU2520DF<br>BU2520DX<br>BU2522AF<br>BU2522AX<br>BU2525A<br>BU2525AF<br>BU2525AX<br>BU2525DF<br>BU2527A<br>BU2527AF<br>BU2527AX | BUZ11A<br>BUZ31<br>BUZ41A<br>BUZ71A<br>BUZ73<br>BUZ80A<br>BUZ90A<br>BUZ91A  | IRFS640  |
| BD115<br>BD135<br>BD136<br>BD137<br>BD138<br>BD139<br>BD140<br>BD175<br>BD176<br>BD177<br>BD179<br>BD180<br>BD201<br>BD202<br>BD204<br>BD229<br>BD232<br>BD233<br>BD234<br>BD235<br>BD236<br>BD237<br>BD238<br>BD239C<br>BD240C<br>BD241  | BF180<br>BF183<br>BF198<br>BF199<br>BF200<br>BF240<br>BF245<br>BF258<br>BF259<br>BF324<br>BF337<br>BF338<br>BF370<br>BF421<br>BF422<br>BF423<br>BF458<br>BF459<br>BF469<br>BF470<br>BF472<br>BF494  | BU2532AL<br>BU2532D<br>BU2532DF<br>BU2708AF<br>BU2722AF.INSULATED<br>BU2727AF<br>BU4507AX   | DTA114EA<br>DTA114ES<br>DTA114TK.S/FACE.MN<br>DTA114TS<br>DTA114YK.S/MNT  | IRFZ20<br>IRFZ34<br>IRFZ40<br>IRFZ44N<br>IRFZ48N   |
| BD115<br>BD135<br>BD136<br>BD137<br>BD138<br>BD139<br>BD140<br>BD175<br>BD176<br>BD177<br>BD179<br>BD180<br>BD201<br>BD202<br>BD204<br>BD229<br>BD232<br>BD233<br>BD234<br>BD235<br>BD236<br>BD237<br>BD238<br>BD239C<br>BD240C<br>BD241  | BF180<br>BF183<br>BF198<br>BF199<br>BF200<br>BF240<br>BF245<br>BF258<br>BF259<br>BF324<br>BF337<br>BF338<br>BF370<br>BF421<br>BF422<br>BF423<br>BF458<br>BF459<br>BF469<br>BF470<br>BF472<br>BF494  | BFT66   | BUY69A  | KRA103M  |
| BD115<br>BD135<br>BD136<br>BD137<br>BD138<br>BD139<br>BD140<br>BD175<br>BD176<br>BD177<br>BD179<br>BD180<br>BD201<br>BD202<br>BD204<br>BD229<br>BD232<br>BD233<br>BD234<br>BD235<br>BD236<br>BD237<br>BD238<br>BD239C<br>BD240C<br>BD241  | BF180<br>BF183<br>BF198<br>BF199<br>BF200<br>BF240<br>BF245<br>BF258<br>BF259<br>BF324<br>BF337<br>BF338<br>BF370<br>BF421<br>BF422<br>BF423<br>BF458<br>BF459<br>BF469<br>BF470<br>BF472<br>BF494  | BFT66   | BUY69A  | KSR1001<br>KSR1002<br>KSR1003<br>KSR1004<br>KSR1007<br>KSR1008<br>KSR2001<br>KSR2002<br>KSR2003<br>KSR2004<br>KSR2007<br>KSR2202   |
| BD115<br>BD135<br>BD136<br>BD137<br>BD138<br>BD139<br>BD140<br>BD175<br>BD176<br>BD177<br>BD179<br>BD180<br>BD201<br>BD202<br>BD204<br>BD229<br>BD232<br>BD233<br>BD234<br>BD235<br>BD236<br>BD237<br>BD238<br>BD239C<br>BD240C<br>BD241  | BF180<br>BF183<br>BF198<br>BF199<br>BF200<br>BF240<br>BF245<br>BF258<br>BF259<br>BF324<br>BF337<br>BF338<br>BF370<br>BF421<br>BF422<br>BF423<br>BF458<br>BF459<br>BF469<br>BF470<br>BF472<br>BF494  | BFT66   | BUY69A  | MEL12  |
| BD115<br>BD135<br>BD136<br>BD137<br>BD138<br>BD139<br>BD140<br>BD175<br>BD176<br>BD177<br>BD179<br>BD180<br>BD201<br>BD202<br>BD204<br>BD229<br>BD232<br>BD233<br>BD234<br>BD235<br>BD236<br>BD237<br>BD238<br>BD239C<br>BD240C<br>BD241  | BF180<br>BF183<br>BF198<br>BF199<br>BF200<br>BF240<br>BF245<br>BF258<br>BF259<br>BF324<br>BF337<br>BF338<br>BF370<br>BF421<br>BF422<br>BF423<br>BF458<br>BF459<br>BF469<br>BF470<br>BF472<br>BF494  | BFT66   | BUY69A  | MEL12  |



2SB755  
 2SB761  
 2SB772  
 2SB774  
 2SB775A  
 2SB776  
 2SB788  
 2SB793  
 2SB810  
 2SB817  
 2SB825  
 2SB826  
 2SB827  
 2SB849  
 2SB856  
 2SB857  
 2SB863  
 2SB870  
 2SB881  
 2SB886  
 2SB891  
 2SB892  
 2SB895  
 2SB907  
 2SB922  
 2SB934  
 2SB939A  
 2SB940A  
 2SB941  
 2SB944  
 2SB945  
 2SB950A  
 2SB974  
 2SB985  
 2SB1010  
 2SB1016A  
 2SB1020  
 2SB1023  
 2SB1030  
 2SB1035  
 2SB1038  
 2SB1050Q  
 2SB1055  
 2SB1061  
 2SB1066  
 2SB1068  
 2SB1077  
 2SB1096  
 2SB1098  
 2SB1099  
 2SB1106  
 2SB1109  
 2SB1117  
 2SB1119S.S/FACE.MN  
 2SB1123.S/FACE.MNT  
 2SB1135  
 2SB1149  
 2SB1155  
 2SB1156  
 2SB1159  
 2SB1162  
 2SB1172  
 2SB1185  
 2SB1186A  
 2SB1202-S/MNT  
 2SB1214  
 2SB1219A.S/FACE.MN  
 2SB1243  
 2SB1254  
 2SB1257  
 2SB1258  
 2SB1261  
 2SB1261Z  
 2SB1267  
 2SB1269  
 2SB1273  
 2SB1274  
 2SB1283  
 2SB1318  
 2SB1329  
 2SB1363  
 2SB1370  
 2SB1375  
 2SB1382  
 2SB1438R  
 2SB1560



2SC151A  
 2SC372  
 2SC373  
 2SC380  
 2SC388  
 2SC394  
 2SC458  
 2SC460  
 2SC461  
 2SC495  
 2SC496  
 2SC509  
 2SC515A  
 2SC535  
 2SC536  
 2SC620  
 2SC668  
 2SC681A  
 2SC710  
 2SC732  
 2SC733  
 2SC734  
 2SC735  
 2SC756  
 2SC763  
 2SC775  
 2SC784  
 2SC785  
 2SC789  
 2SC799  
 2SC815  
 2SC828  
 2SC829  
 2SC838  
 2SC839  
 2SC900  
 2SC901A  
 2SC929  
 2SC930  
 2SC932D  
 2SC935  
 2SC937  
 2SC941  
 2SC945  
 2SC982  
 2SC1000  
 2SC1008-M.METAL  
 2SC1008-P.PLASTIC  
 2SC1017  
 2SC1025  
 2SC1030  
 2SC1047  
 2SC1050  
 2SC1051  
 2SC1060  
 2SC1061  
 2SC1070  
 2SC1096  
 2SC1106  
 2SC1107  
 2SC1114  
 2SC1162  
 2SC1164  
 2SC1172B  
 2SC1173  
 2SC1175  
 2SC1195  
 2SC1213  
 2SC1215  
 2SC1222  
 2SC1226  
 2SC1312  
 2SC1317  
 2SC1318  
 2SC1325A  
 2SC1344

2SC1345  
 2SC1358  
 2SC1359  
 2SC1360  
 2SC1363  
 2SC1364  
 2SC1368  
 2SC1383  
 2SC1384  
 2SC1390  
 2SC1398  
 2SC1413A  
 2SC1417  
 2SC1419  
 2SC1444  
 2SC1447  
 2SC1449  
 2SC1454  
 2SC1473  
 2SC1502  
 2SC1506  
 2SC1507  
 2SC1509  
 2SC1514  
 2SC1515K  
 2SC1517AK  
 2SC1520  
 2SC1567  
 2SC1568  
 2SC1569  
 2SC1573  
 2SC1577  
 2SC1583  
 2SC1586  
 2SC1602  
 2SC1624  
 2SC1626  
 2SC1627  
 2SC1664  
 2SC1674  
 2SC1675  
 2SC1678  
 2SC1683  
 2SC1684  
 2SC1685  
 2SC1686  
 2SC1687  
 2SC1730  
 2SC1735  
 2SC1740  
 2SC1741  
 2SC1756  
 2SC1775  
 2SC1815  
 2SC1819  
 2SC1826  
 2SC1827  
 2SC1841  
 2SC1845  
 2SC1846  
 2SC1847  
 2SC1853  
 2SC1871A  
 2SC1875  
 2SC1904  
 2SC1906  
 2SC1913  
 2SC1921  
 2SC1922  
 2SC1923  
 2SC1941  
 2SC1942  
 2SC1944  
 2SC1945  
 2SC1947  
 2SC1957  
 2SC1959  
 2SC1965  
 2SC1969  
 2SC1973  
 2SC1983  
 2SC1984  
 2SC1985  
 2SC1986  
 2SC2001  
 2SC2002  
 2SC2021  
 2SC2026  
 2SC2027

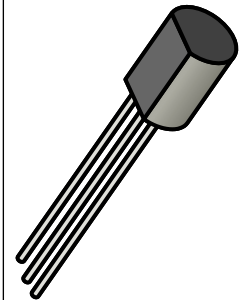
2SC2028  
 2SC2029  
 2SC2060  
 2SC2068  
 2SC2071  
 2SC2073  
 2SC2075  
 2SC2078  
 2SC2086  
 2SC2120  
 2SC2131  
 2SC2153  
 2SC2166  
 2SC2167  
 2SC2168  
 2SC2206  
 2SC2209  
 2SC2228  
 2SC2229  
 2SC2230  
 2SC2233  
 2SC2235  
 2SC2236  
 2SC2238  
 2SC2240  
 2SC2258  
 2SC2259  
 2SC2271  
 2SC2274  
 2SC2275  
 2SC2290  
 2SC2291  
 2SC2307  
 2SC2308  
 2SC2310  
 2SC2311  
 2SC2312  
 2SC2314  
 2SC2320  
 KSC2330  
 2SC2331.TO220  
 KSC2331.SC-51  
 2SC2334  
 2SC2335  
 2SC2336  
 2SC2344  
 2SC2351.S/FACE.MNT  
 2SC2362  
 2SC2365  
 2SC2369  
 2SC2371  
 2SC2373  
 2SC2377  
 2SC2407A  
 2SC2411K.S/FACE.MN  
 2SC2412.S/FACE.MNT  
 2SC2458  
 2SC2462.S/FACE.MNT  
 2SC2481  
 2SC2482  
 2SC2485  
 2SC2491  
 2SC2494  
 2SC2499  
 2SC2500  
 2SC2502  
 2SC2525  
 2SC2538  
 2SC2540  
 2SC2542  
 2SC2545  
 2SC2547E  
 2SC2551  
 2SC2552  
 2SC2555  
 2SC2562  
 2SC2564  
 2SC2565  
 2SC2570A  
 2SC2577  
 2SC2578  
 2SC2579  
 2SC2580  
 2SC2581  
 2SC2591  
 2SC2592  
 2SC2594  
 2SC2603  
 2SC2604

2SC2610  
 2SC2611  
 2SC2621  
 2SC2625  
 2SC2629  
 2SC2632  
 2SC2634  
 2SC2653  
 2SC2654  
 2SC2655  
 2SC2665  
 2SC2668  
 2SC2669  
 2SC2671  
 2SC2673  
 2SC2688  
 2SC2690A  
 2SC2695  
 2SC2703  
 2SC2704  
 2SC2705  
 2SC2706  
 2SC2714.S/FACE.MNT  
 2SC2720  
 2SC2749  
 2SC2750  
 2SC2751  
 2SC2752  
 2SC2753  
 2SC2762  
 2SC2774  
 2SC2785  
 2SC2790  
 2SC2791  
 2SC2792  
 2SC2802  
 2SC2808  
 2SC2810  
 2SC2834A  
 2SC2837  
 2SC2839  
 2SC2840  
 2SC2851  
 2SC2855  
 2SC2876  
 2SC2878  
 2SC2898  
 2SC2909  
 2SC2910  
 2SC2911  
 2SC2921  
 2SC2922  
 2SC2928  
 2SC2939  
 2SC2958  
 2SC2964  
 2SC2965  
 2SC2979  
 2SC2987  
 2SC2987A  
 2SC2999  
 2SC3000  
 2SC3019  
 2SC3021  
 2SC3025  
 2SC3026  
 2SC3030  
 2SC3039  
 2SC3040  
 2SC3042  
 2SC3060  
 2SC3061  
 2SC3066  
 2SC3068  
 2SC3070  
 2SC3076  
 2SC3086  
 2SC3087  
 2SC3089  
 2SC3101  
 2SC3102  
 2SC3117  
 2SC3121.S/FACE.MNT  
 2SC3122.S/FACE.MNT  
 2SC3148  
 2SC3150  
 2SC3151  
 2SC3152

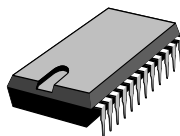
|                |                    |                    |                    |          |
|----------------|--------------------|--------------------|--------------------|----------|
| 2SC3153        | 2SC3466            | 2SC4064            | 2SC5239            | 2SD859   |
| 2SC3156        | 2SC3467            | 2SC4081.S/FACE.MNT | 2SC5241            | 2SD860A  |
| 2SC3157        | 2SC3482            | 2SC4106            | 2SC5242            | 2SD863   |
| 2SC3158        | 2SC3486            | 2SC4107            | 2SC5244A           | 2SD864K  |
| 2SC3159        | 2SC3495            | 2SC4111            | 2SC5250            | 2SD866A  |
| 2SC3169        | 2SC3502            | 2SC4122            | 2SC5253            | 2SD868   |
| 2SC3175        | 2SC3505            | 2SC4123            | 2SC5270A           | 2SD869   |
| 2SC3178        | 2SC3506            | 2SC4137            | 2SC5287            | 2SD870   |
| 2SC3179        | 2SC3507            | 2SC4138            | 2SC5296            | 2SD871   |
| 2SC3180        | 2SC3519A           | 2SC4157            | 2SC5297            | 2SD876   |
| 2SC3181        | 2SC3549            | 2SC4161            | 2SC5299            | 2SD880   |
| 2SC3182        | 2SC3552            | 2SC4169            | 2SC5331            | 2SD882   |
| 2SC3192        | 2SC3553            | 2SC4204            | 2SC5386.           | 2SD889   |
| 2SC3193        | 2SC3559            | 2SC4231            | KSC5386            | 2SD894   |
| 2SC3198        | 2SC3568            | 2SC4234            | 2SC5411            | 2SD895   |
| 2SC3199        | 2SC3570            | 2SC4235            | 2SC5447            | 2SD896   |
| 2SC3202        | 2SC3591            | 2SC4236            | 2SC5449            | 2SD898A  |
| 2SC3203        | 2SC3605            | 2SC4237            |                    | 2SD900B  |
| 2SC3206        | 2SC3611            | 2SC4242            | 2SD24Y             | 2SD904   |
| 2SC3207        | 2SC3616            | 2SC4288A           | 2SD198             | 2SD905   |
| 2SC3212A       | 2SC3619            | 2SC4290A           | 2SD200             | 2SD917   |
| 2SC3225        | 2SC3621            | 2SC4293            | 2SD227             | 2SD920   |
| 2SC3227        | 2SC3659            | 2SC4297            | 2SD261             | 2SD946   |
| 2SC3228        | 2SC3668            | 2SC4298            | 2SD288             | 2SD951   |
| 2SC3229        | 2SC3675            | 2SC4300            | 2SD288             | 2SD953   |
| 2SC3230        | 2SC3676            | 2SC4304            | 2SD313             | 2SD957   |
| 2SC3242        | 2SC3678            | 2SC4312            | 2SD315             | 2SD958   |
| 2SC3243        | 2SC3679            | 2SC4313            | 2SD325             | 2SD965   |
| 2SC3244        | 2SC3680            | 2SC4351            | 2SD330             | 2SD966   |
| 2SC3245        | 2SC3687            | 2SC4369            | 2SD350.JAPAN.ORIG  | 2SD973   |
| 2SC3246        | 2SC3688            | 2SC4381            | 2SD350A.JAPAN.ORIG | 2SD986   |
| 2SC3257        | 2SC3691            | 2SC4386            | 2SD350A-E.EUROPEAN | 2SD992   |
| 2SC3260        | 2SC3704.S/FACE.MNT | 2SC4408            |                    | 2SD998   |
| 2SC3261        | 2SC3729            | 2SC4419            | 2SD352             | KSD998   |
| 2SC3262        | 2SC3732            | 2SC4429            | 2SD353             | 2SD1012  |
| 2SC3263        | 2SC3743            | 2SC4467            | 2SD362             | 2SD1037  |
| 2SC3264        | 2SC3746            | 2SC4468            | 2SD371             | 2SD1044  |
| 2SC3270        | 2SC3748            | 2SC4479            | 2SD380             | 2SD1046  |
| 2SC3277        | 2SC3749            | 2SC4488            | 2SD381             | 2SD1047  |
| 2SC3279        | 2SC3750            | 2SC5404            | 2SD387             | 2SD1051  |
| 2SC3280        | 2SC3752            | 2SC4517            | 2SD388A            | 2SD1061  |
| 2SC3281        | 2SC3783            | 2SC4517A           | 2SD389             | 2SD1062  |
| 2SC3284        | 2SC3788            | 2SC4538            | 2SD400             | 2SD1063  |
| 2SC3293        | 2SC3792            | 2SC4542            | 2SD401A            | 2SD1065  |
| 2SC3296        | 2SC3795A           | 2SC4544            | 2SD415             | 2SD1071  |
| 2SC3298        | 2SC3795B           | 2SC4581            | 2SD424             | 2SD1073  |
| 2SC3306        | 2SC3807            | 2SC4582            | 2SD427             | 2SD1094  |
| 2SC3307        | 2SC3832            | 2SC4622            | 2SD438             | 2SD1110  |
| 2SC3309        | 2SC3833            | 2SC4630            | 2SD439             | 2SD1111  |
| 2SC3311        | 2SC3852            | 2SC4688            | 2SD467             | 2SD1113K |
| 2SC3318        | 2SC3854            | 2SC4706            | 2SD468             | 2SD1128  |
| 2SC3320        | 2SC3855            | 2SC4719            | 2SD471             | 2SD1133  |
| 2SC3329        | 2SC3856            | 2SC4741            | 2SD476             | 2SD1135  |
| 2SC3331        | 2SC3858            | 2SC4742            | 2SD525             | 2SD1138  |
| 2SC3337        | 2SC3866            | 2SC4744            | 2SD526             | 2SD1140  |
| 2SC3346        | 2SC3868            | 2SC4747            | 2SD545             | 2SD1145  |
| 2SC3353        | 2SC3883            | 2SC4762            | 2SD549             | 2SD1148  |
| 2SC3355        | 2SC3884A           | 2SC4763            | 2SD556             | 2SD1151  |
| 2SC3356.S/FACE | 2SC3885A           | 2SC4767            | 2SD558             | 2SD1159  |
| 2SC3358        | 2SC3886A           | 2SC4769            | 2SD560             | 2SD1163A |
| 2SC3369        | 2SC3890            | 2SC4770            | 2SD600             | 2SD1164  |
| 2SC3371        | 2SC3892A           | 2SC4793            | 2SD613             | 2SD1173  |
| 2SC3377        | 2SC3893A           | 2SC4804            | 2SD627             | 2SD1175  |
| 2SC3379        | 2SC3894            | 2SC4833            | 2SD635             | 2SD1185  |
| 2SC3381        | 2SC3895            | 2SC4834            | 2SD636             | 2SD1186  |
| 2SC3383        | 2SC3896            | 2SC4886            | 2SD637             | 2SD1190  |
| 2SC3399        | 2SC3897            | 2SC4908            | 2SD638             | 2SD1191  |
| 2SC3400        | 2SC3907            | 2SC4916            | 2SD639             | 2SD1192  |
| 2SC3401        | 2SC3909            | 2SC4923            | 2SD655             | 2SD1196  |
| 2SC3402        | 2SC3920            | 2SC4924            | 2SD662             | 2SD1207  |
| 2SC3404        | 2SC3943            | 2SC4927            | 2SD666             | 2SD1211  |
| 2SC3405        | 2SC3944            | 2SC4977            | 2SD667A            | 2SD1212  |
| 2SC3410        | 2SC3950            | 2SC5002            | 2SD669A            | 2SD1227M |
| 2SC3412        | 2SC3953            | 2SC5003            | 2SD686             | 2SD1246  |
| 2SC3416        | 2SC3954            | KSC5027.TO220.CASE | 2SD687             | 2SD1257  |
| 2SC3417        | 2SC3955            | 2SC5027.PLASTIC.CA | 2SD688             | 2SD1260  |
| 2SC3419        | 2SC3964            | KSC5030F           | 2SD716             | 2SD1264  |
| 2SC3420        | 2SC3973A           | 2SC5047            | 2SD718             | 2SD1265  |
| 2SC3421        | 2SC3979            | 2SC5048            | 2SD729H            | 2SD1266  |
| 2SC3422        | 2SC3996            | 2SC5070            | 2SD734             | 2SD1267A |
| 2SC3423        | 2SC3997            |                    | 2SD768K            | 2SD1269  |
| 2SC3446        | 2SC3998            | 2SC5071            | 2SD807             | 2SD1271  |
| 2SC3447        | 2SC4004            | 2SC5129            | 2SD811             | 2SD1273  |
| 2SC3449        | 2SC4020            | 2SC5144            | 2SD819             | 2SD1274B |
| 2SC3450        | 2SC4028            | 2SC5148            | 2SD820             | 2SD1275  |
| 2SC3457        | 2SC4055            | 2SC5149            | 2SD821             | 2SD1276  |
| 2SC3459        | 2SC4058            | 2SC5150            | 2SD837             | 2SD1279  |
| 2SC3460        | 2SC4059            | 2SC5200            | 2SD841             | 2SD1289  |
| 2SC3461        | 2SC4060            | 2SC5207A           | 2SD858             | 2SD1292  |



|          |                    |                   |          |
|----------|--------------------|-------------------|----------|
| 2SD1296  | 2SD1767.S/FACE.MNT | 2SJ160            | 2SK1058  |
| 2SD1297  | 2SD1769            | 2SJ162            | 2SK1081  |
| 2SD1298  | 2SD1785            | 2SJ174            | 2SK1082  |
| 2SD1302  | 2SD1791            | 2SJ175            | 2SK1086  |
| 2SD1308  | 2SD1792            | 2SJ201            | 2SK1102  |
| 2SD1330  | 2SD1796            | 2SJ217            | 2SK1117  |
| 2SD1347  | 2SD1801            | 2SJ307            | 2SK1118  |
| 2SD1376K | 2SD1805            | 2SJ308            | 2SK1156  |
| 2SD1380  | 2SD1812Q           | 2SJ449            | 2SK1162  |
| 2SD1384  | 2SD1816            | 2SJ477            | 2SK1170  |
| 2SD1395  | 2SD1835            |                   | 2SK1185  |
| 2SD1397  | 2SD1846            | 2SK19             | 2SK1189  |
| 2SD1398  | 2SD1847            |                   | 2SK1192  |
| 2SD1402  | 2SD1850            |                   | 2SK1833  |
| 2SD1403  | 2SD1856            | 2SK30A            | 2SK1204  |
| 2SD1406  | 2SD1863            | 2SK33             | 2SK1213  |
| 2SD1407  | 2SD1877            | 2SK34             | 2SK1217  |
| 2SD1409  | 2SD1878            | 2SK40             | 2SK1221  |
| 2SD1413  | 2SD1878F.INSULATED | 2SK41             | 2SK1248  |
| KTD1414  | 2SD1879.INSULATED  | 2SK49             | 2SK1250  |
| 2SD1415  | 2SD1880            | 2SK54             | 2SK1271  |
| 2SD1417  | 2SD1883            | 2SK55             | 2SK1304  |
| 2SD1425  | 2SD1884            | 2SK105            | 2SK1342  |
| 2SD1426  | 2SD1886            | 2SK117Y           | 2SK1350  |
| 2SD1427  | 2SD1887            | 2SK118            | 2SK1356  |
| 2SD1428  | 2SD1894            | 2SK125            | 2SK1357  |
| 2SD1431  | 2SD1895            | 2SK128            | 2SK1358  |
| 2SD1432  | 2SD1903            | 2SK147            | 2SK1359  |
| 2SD1433  | 2SD1905            | 2SK161            | 2SK1377  |
| 2SD1438  | 2SD1907            | 2SK163            | 2SK1397  |
| 2SD1439  | 2SD1910            | 2SK168            | 2SK1420  |
| 2SD1441  | 2SD1911            | 2SK192A           | 2SK1460  |
| 2SD1442  | 2SD1913            | 2SK193            | 2SK1461  |
| 2SD1447  | 2SD1912            | 2SK210.S/FACE.MNT | 2SK1507  |
| 2SD1453  | 2SD1933            | 2SK212            | 2SK1518  |
| 2SD1455  | 2SD1941            | 2SK213            | 2SK1530  |
| 2SD1456  | 2SD1944            | 2SK215            | 2SK1535  |
| 2SD1457A | 2SD1985            | 2SK223            | 2SK1537  |
| 2SD1458  | 2SD1992A           | 2SK246            | 2SK1544  |
| 2SD1468  | 2SD1996            | 2SK301            | 2SK1595  |
| 2SD1496  | 2SD2006            | 2SK304            | 2SK1611  |
| 2SD1497  | 2SD2018            | 2SK345            | 2SK1643  |
| 2SD1507  | 2SD2037            | 2SK346            | 2SK1696  |
| 2SD1508  | 2SD2052            | 2SK369            | 2SK1745  |
| 2SD1509  | 2SD2057            | 2SK381            | 2SK1794  |
| 2SD1541  | 2SD2058            | 2SK386            | 2SK1916  |
| 2SD1545  | 2SD2060            | 2SK389            | 2SK1924  |
| 2SD1546  | 2SD2092            | 2SK427            | 2SK1940  |
| 2SD1547  | 2SD2125            | 2SK430            | 2SK2038  |
| 2SD1548  | 2SD2144S           | 2SK511            | 2SK2039  |
| 2SD1554  | 2SD2166            | 2SK514H           | 2SK2043  |
| 2SD1555  | 2SD2243            | 2SK525            | 2SK2049  |
| 2SD1556  | 2SD2253            | 2SK526            | 2SK2056  |
| 2SD1565  | 2SD2259            | 2SK538            | 2SK2077  |
| 2SD1571  | 2SD2331            | 2SK539            | 2SK2128  |
| 2SD1577  | 2SD2333            | 2SK564            | 2SK2129  |
| 2SD1584  | 2SD2334            | 2SK622            | 2SK2134  |
| 2SD1584Z | 2SD2340            | 2SK679            | 2SK2136  |
| 2SD1589  | 2SD2348            | 2SK684            | 2SK2141  |
| 2SD1591  | 2SD2375            | 2SK685            | 2SK2161  |
| 2SD1609  | 2SD2390            | 2SK699            | 2SK2223  |
| 2SD1617  | 2SD2395            | 2SK701            | 2SK2275  |
| 2SD1630  | 2SD2399            | 2SK703            | 2SK2320  |
| 2SD1632  | 2SD2439            | 2SK719            | 2SK2333  |
| 2SD1640  | 2SD2498            | 2SK724            | 2SK2372  |
| 2SD1649  | 2SD2499            | 2SK725            | 2SK2388  |
| 2SD1650  | 2SD2500            | 2SK727            | 2SK2417  |
| 2SD1651  | 2SD2553            | 2SK786            | 2SK2485  |
| 2SD1666  | 2SD2576            | 2SK787            | 2SK2487  |
| 2SD1669  | 2SD2539            | 2SK790            | 2SK2632  |
| 2SD1677  | 2SD2578            | 2SK791            | 2SK2645  |
| 2SD1680  | KSD5071            | 2SK792            | 2SK2651  |
| 2SD1682  | 2SD5072            | 2SK793            | 2SK2671  |
| 2SD1701  | KSD5075ST          | 2SK794            | 2SK2717  |
| 2SD1710  | KSD5076            | 2SK817            | 2SK2718  |
| 2SD1711  | 2SD5447            | 2SK818A           | 2SK2723  |
| 2SD1714  | KSD5702            | 2SK854            | 2SK2750  |
| 2SD1716  |                    | 2SK872            | 2SK2761  |
| 2SD1729  |                    | 2SK903            | 2SK2834  |
| 2SD1730  | 2SJ55              | 2SK904            | 2SK2847  |
| 2SD1732  | 2SJ72              | 2SK947            | 2SK2848  |
| 2SD1739  | 2SJ74              | 2SK951            | 2S0680   |
| 2SD1759  | 2SJ76              | 2SK954            |          |
| 2SD1760  | 2SJ78              | 2SK955            |          |
| 2SD1761  | 2SJ79              | 2SK962            | 3S0680RF |
| 2SD1762  | 2SJ109             | 2SK1023           |          |
| 2SD1763A | 2SJ116             | 2SK1024           |          |
| 2SD1764  | 2SJ117             | 2SK1044           |          |
| 2SD1765  | 2SJ122             | 2SK1045           |          |



3SK22



3SK45  
3SK74  
MEC5967

—I.C.'S  
A1019.S/FACE.MNT  
A1034  
A7530N

AH1201  
AH1202

AM26LS31PC

AN115  
AN214Q  
AN217  
AN236  
AN240P  
AN252  
AN262  
AN277  
AN278  
AN302  
AN303  
AN305  
AN307  
AN318  
AN355  
AN360  
AN608  
AN610P  
AN612  
AN1358  
AN2293  
AN3215K  
AN3311K  
AN3312  
AN3313  
AN3320K  
AN3331K  
AN3386NK  
AN3792  
AN3794  
AN3795N  
AN3810K  
AN3811NK  
AN3812K  
AN3814K  
AN3821K  
AN3822K  
AN3830K  
AN3990K  
AN5010  
AN5020  
AN5026K  
AN5033  
AN5034  
AN5043  
AN5071  
AN5132  
AN5135NK  
AN5138NK  
AN5150N  
AN5151N  
AN5250  
AN5256  
AN5260  
AN5262  
AN5265  
AN5270  
AN5410  
AN5421  
AN5431N  
AN5435  
AN5436N  
AN5510

AN5512  
AN5515  
AN5521  
AN5534  
AN5600K  
AN5601K  
AN5612  
AN5615  
AN5620X  
AN5622  
AN5625N  
AN5630  
AN5650  
AN5701N  
AN5715K  
AN5733  
AN5750  
AN5753  
AN5763  
AN5766K  
AN5790N  
AN5836  
AN5855K  
AN5856K  
AN5858K  
AN5862K  
AN5900  
AN6209  
AN6248  
AN6250  
AN6263  
AN6306  
AN6308  
AN6310  
AN6326N  
AN6340  
AN6341N  
AN6342N  
AN6343  
AN6344  
AN6346N  
AN6350  
AN6357N  
AN6359N  
AN6360  
AN6362  
AN6363  
AN6387  
AN6391NK  
AN6500  
AN6540  
AN6550  
AN6551  
AN6553  
AN6554  
AN6555  
AN6557  
AN6562  
AN6610  
AN6650  
AN6651  
AN6671K  
AN6677  
AN6873N  
AN6877  
AN6878  
AN6881  
AN6884  
AN6912  
AN6913  
AN6914  
AN7025K  
AN7062N  
AN7072  
AN7112E  
AN7114E  
AN7115E  
AN7116  
AN7118  
AN7130E  
AN7131  
AN7133N  
AN7134N  
AN7135  
AN7140  
AN7141  
AN7143  
AN7145M  
AN7147N

AN7148  
AN7149N  
AN7156N  
AN7158N  
AN7161N  
AN7164  
AN7166  
AN7168  
AN7170  
AN7171K  
AN7173K  
AN7174K  
AN7177  
AN7178  
AN7190K  
AN7195K  
AN7205  
AN7213  
AN7220  
AN7223  
AN7225  
AN7226  
AN7254  
AN7256  
AN7273  
AN7310  
VC328  
AN7312  
AN7320  
AN7332S.S/FACE.MNT  
AN7410N  
AN7411  
AN7414  
AN7420  
AN7470  
AN7805R  
AN7806  
AN7812  
AN7812R  
AN7818F  
AN8377N  
AN8389S.S/FACE.MNT

APU2470

BA226  
BA235  
BA301  
BA311  
BA313  
BA314  
BA318  
BA328  
BA333  
BA335  
BA340  
BA343  
BA403  
BA516  
BA518  
BA526  
BA527  
BA532  
BA536  
BA546  
BA618  
BA631  
BA656  
BA658  
BA707  
BA715  
BA718  
BA728.DIL  
BA728N.SIL  
BA823  
BA855A  
BA867  
BA1310F  
BA1332  
BA1332L.SIL  
BA1330F.S/FACE.MNT  
BA1404  
BA1604  
BA3121  
BA3304  
BA3308  
BA3312N  
BA3406L

BA3408  
BA3416BL  
BA3503F.S/FACE.MNT  
BA3505F.S/FACE.MNT  
BA3520  
BA3521  
BA3706  
BA3812L  
BA3822LS  
BA3824LS  
BA3904A  
BA3910BV3  
BA3918  
BA3920  
BA4220  
BA4236L  
BA4402  
BA4422AN  
BA5101  
BA5102A  
BA5115  
BA5208AF.S/FACE.MN  
BA5402A  
BA5406  
BA5412  
BA5413  
BA5415A  
BA5416  
BA5417  
BA5947FP.S/MNT  
BA6104  
BA6109  
BA6121  
BA6122A  
BA6124  
BA6125  
BA6137  
BA6144  
BA6149LS  
BA6198FP.S/FACE  
BA6208  
BA6209  
BA6218  
BA6219B  
BA6222  
BA6227  
BA6229  
BA6238A  
BA6247  
BA6248  
BA6259N  
BA6280AF.S/FACE.MN  
BA6290A  
BA6294  
BA6297AFP.S/FACE.M  
BA6296FP.S/FACE.MN  
BA6299FP.S/FACE.MN  
BA6302A  
BA6303  
BA6304  
BA6305  
BA6328  
BA6334  
BA6353S  
BA6392FP.S/FACE.MN  
BA6398FP  
BA6396FP.S/FACE.MN  
BA6397FP.S/FACE.MN  
BA6411  
BA6413  
BA6418N  
BA6430S  
BA6432S  
BA6435S  
BA6439P  
BA6439S  
BA6566  
BA6870S  
BA6887V3  
BA6993.DIL  
BA7004  
BA7007  
BA7021  
BA7022A  
BA7023L  
BA7024  
BA7039  
BA7125L  
BA7230LS

BA7267S  
BA7604N  
BA7710S  
BA7720S  
BA7740S  
BA7743S  
BA7751ALS  
BA7752LS  
BA7755  
BA7765AS  
BA7766AS  
BA7767AS  
BA7795LS  
BA8205  
BA10324A  
BA10339  
BA10358N  
BA10393D.DIL  
BA10393N.SIL  
BA12004  
BA15218D.DIL  
BA15218N.SIL

BL2710..REG.BLK  
BL2711N.REG.BLK

BU2896AK.S/FACE.MN  
BU2896K.S/FACE.MNT  
BU2751S  
BU2753AS  
BU2845S  
BU2872AK.S/FACE.MN  
BU2899K.S/FACE.MNT  
BU3738F.S/FACE.MNT  
BU4094BCF.S/FACE.M

CA733  
CA1310  
CA1391E  
CA3046

CD1031CS

CIC7018E  
CIC9140BE

CNX62A  
CNX82A  
CNX83A


CVA2400A  
CVA2411TX

CX131A  
CX138  
CX141  
CX150B  
CX157  
CX804  
CX20061  
CX20106A  
CX20126  
CX20187  
CX20198  
CX22008  
CX22009  
CX23025

CXA1044P  
CXA1081.DIL  
CXA1081M.S/FACE.MN  
CXA1082BQ.S/FACE.M  
CXA1213BS  
CXA1213S  
CXA1198AP  
CXA1238S  
CXA1279AS  
CXA1291P  
CXA1372AQ.S/MNT  
CXA1372S  
CXA8008P

|   |  |   |  |   |  |
|---|--|---|--|---|--|
| CXD1125Q.S/MNT<br>CXD1130Q.S/FACE.MN<br>CXD1135Q.S/MNT<br>CXD2500AQ.S/MNT   | HA12428V<br>HA12430<br>HA13001<br>HA13007<br>HA13108<br>HA13117<br>HA13118<br>HA13119<br>HA13127<br>HA13128<br>HA13150A<br>HA13151<br>HA13152<br>HA13153A<br>HA13154A<br>HA13155<br>HA13158A<br>HA13403<br>HA13408<br>HA13412<br>HA13426<br>HA13431<br>HA13441<br>HA13491S.S/FACE.MN<br>HA17324<br>HA17339<br>HA17358<br>HA17384PS<br>HA17393<br>HA17431P/PA<br>HA17458PS<br>HA17524P<br>HA17555<br>HA17558<br>HA17741<br>HA17806<br>HA17808<br>HA17812<br>HA17815 | KA2133<br>KA2154<br>KA2192<br>KA2201<br>KA2206<br>KA2209<br>KA2212<br>KA2213<br>KA2220<br>KA2221<br>KA2224<br>KA2261<br>KA2264.SIL<br>KA2264S.S/FACE.MNT<br>KA2295Q<br>KA2402<br>KA2651<br>KA2914A<br>KA2915<br>KA2919<br>KA2922<br>KA2944<br>KA2945<br>KA2983<br>KA3213<br>KA3525A<br>KA3842<br>KA3843<br>KA3872<br>KA3882<br>KA3884<br>KA4558D.DIL<br>KA4558S.SIL<br>KA7302<br>KA7533<br>KA7552<br>KA7630<br>KA7631<br>KA8301<br>KA8306<br>KA8320Q.S/FACE.MNT<br>KA8321Q.S/FACE.MNT<br>KA8322.S/FACE.MNT<br>KA8325Q.S/FACE.MNT<br>KA8334B.S/FACE.MNT<br>KA9201.S/MNT<br>KA9220C.S/FACE.MNT<br>KA9257<br>KA22134<br>KA22135<br>KA22233<br>KA22241<br>KA22242<br>KA22261<br>KA22292Q<br>KA22427<br>KA22471<br>KA22495 | L200C<br>L487<br>L4805CV<br>L4810CV<br>L4885CV<br>L4960<br>L5631   | LA4471<br>LA4490<br>LA4495<br>LA4498<br>LA4500<br>LA4505<br>LA4507<br>LA4508<br>LA4510<br>LA4555<br>LA4557<br>LA4570M.S/FACE.MNT<br>LA4571M.S/MNT<br>LA4597<br>LA4598<br>LA4603<br>LA4620<br>LA4625<br>LA4630N<br>LA4700<br>LA4705<br>LA4725<br>LA4743B<br>LA4743K<br>LA4467<br>LA4468<br>LA5004<br>LA5004M.S/FACE.MNT<br>LA5112N<br>LA5512N<br>LA5521D<br>LA5522<br>LA5523<br>LA5524.DIL<br>LA5524M.S/FACE.MNT<br>LA5525<br>LA5530<br>LA5613<br>LA5668<br>LA5700<br>LA6324<br>LA6358N<br>LA6393S<br>LA6458D<br>LA6458S<br>LA6510<br>LA6515<br>LA6520<br>LA6524<br>LA6532.S/FACE.MNT<br>LA7016<br>LA7018<br>LA7031<br>LA7032<br>LA7033<br>LA7034<br>LA7035<br>LA7042<br>LA7045<br>LA7051<br>LA7072<br>LA7096<br>LA7116<br>LA7124<br>LA7210<br>LA7212<br>LA7222<br>LA7224<br>LA7282<br>LA7292<br>LA7294<br>LA7295<br>LA7297<br>LA7305N<br>LA7311<br>LA7315<br>LA7320<br>LA7321<br>LA7323<br>LA7330<br>LA7331N<br>LA7333<br>LA7340<br>LA7375<br>LA7376<br>LA7384<br>LA7390<br>LA7391A<br>LA7411 |  |
| DBL1009<br>DBL2002  |  |   |  |   |  |
| DMB3520VV<br>DMB3521SY  |  |   | LA1130<br>LA1135<br>LA1140<br>LA1150<br>LA1180<br>LA1201<br>LA1210<br>LA1222<br>LA1230<br>LA1235<br>LA1240<br>LA1245<br>LA1260<br>LA1265<br>LA1266<br>LA1270<br>LA1352<br>LA1357<br>LA1363<br>LA1365<br>LA1383<br>LA1385<br>LA1805<br>LA1810<br>LA2010<br>LA2100<br>LA2730<br>LA3115<br>LA3120<br>LA3160<br>LA3161<br>LA3210<br>LA3220<br>LA3301<br>LA3350<br>LA3361<br>LA3370<br>LA3375<br>LA3376<br>LA3400N<br>LA3401<br>LA3600<br>LA3607<br>LA4050P<br>LA4051P<br>LA4101<br>LA4108<br>LA4112<br>LA4125<br>LA4140<br>LA4142<br>LA4145<br>LA4147<br>LA4162<br>LA4170<br>LA4180<br>LA4182<br>LA4183<br>LA4185<br>LA4190<br>LA4192<br>LA4200<br>LA4201<br>LA4220.MOD.KIT<br>LA4227<br>LA4261<br>LA4265<br>LA4270<br>LA4280<br>LA4282<br>LA4422<br>LA4440<br>LA4445<br>LA4446<br>LA4450<br>LA4451N<br>LA4460<br>LA4461<br>LA4465 |   |  |
| DTS02P-A4<br>DTS03NPA3  |  |   |  |   |  |
| EA7317B   |  |   |  |   |  |
| FA5304<br>FA5311  |  |   |  |   |  |
| GL3120  |  |   |  |   |  |
| HA178M05P<br>HA178M08<br>HA1125<br>HA1137W<br>HA1147<br>HA1154<br>HA1156W<br>HA1196<br>HA1197<br>HA1199<br>HA1308<br>HA1338<br>HA1350S<br>HA1366W<br>HA1366WR<br>HA1372<br>HA1377A<br>HA1384<br>HA1392<br>HA1398<br>HA1406<br>HA11211<br>HA11219<br>HA11223W<br>HA11225<br>HA11226<br>HA11227<br>HA11235<br>HA11238<br>HA11401<br>HA11414<br>HA11423<br>HA11440A<br>HA11701<br>HA11703<br>HA11711<br>HA11715<br>HA11724<br>HA11725<br>HA11741<br>HA11741NT<br>HA11744<br>HA11744NT<br>HA11745<br>HA11745NT<br>HA11747<br>HA11749<br>HA11752<br>HA11857NT<br>HA12003<br>HA12005<br>HA12010<br>HA12013<br>HA12016<br>HA12038NT<br>HA12045<br>HA12046<br>HA12047<br>HA12074NT<br>HA12135A<br>HA12411<br>HA12413<br>HA12427AV | HD14013BP<br>HD14052P<br>HD14081BP<br>HD14538BP<br>HD38980C<br>HD38991A<br>HD38993A  |   |  |   |  |
|   | HG5412   |   |  |   |  |
|   | HIS0169C   |   |  |   |  |
|   | HM9102   |   |  |   |  |
|   | IR3N05<br>IR2403<br>IR94558  |   |  |   |  |
|   | JU0003<br>JU0004<br>JU0005<br>JU0006<br>JU0012<br>JU0047<br>JU0076<br>JU0114<br>JU0116<br>JU0130<br>JU0168   | KIA324<br>KIA358N<br>KIA494<br>KIA567P<br>KIA6205H<br>KIA6210AH<br>KIA6221H<br>KIA6225S<br>KIA6268P<br>KIA6269P<br>KIA6280H<br>KIA6281H<br>KIA6282K<br>KIA6283K<br>KIA6299H<br>KIA7217<br>KIA7640AP<br>KIA7705P<br>KIA7805<br>KIA7806<br>KIA7809<br>KIA7812<br>KIA8127N<br>KIA8210<br>KIA4558S<br>KIA75558P   |  |   |  |
|   | JRC2352D<br>JRC2902<br>JRC3403AD<br>JRC4419A<br>JRC7815A<br>JRC10311   |   |  |   |  |
|   | KA386<br>KA431Z<br>KA555<br>KA1222<br>KA2101<br>KA2102A<br>KA2130A<br>KA2131   |   |  |   |  |



|  |   |  |  |  |
|--|---|--|--|--|
| LA7416<br>LA7505<br>LA7520<br>LA7530<br>LA7530N<br>LA7535<br>LA7555<br>LA7575<br>LA7577V<br>LA7680<br>LA7687A<br>LA7688N<br>LA7800<br>LA7801<br>LA7804<br>LA7806<br>LA7808<br>LA7820<br>LA7823<br>LA7824<br>LA7830<br>LA7831N<br>LA7832<br>LA7833<br>LA7835<br>LA7837<br>LA7838<br>LA7840<br>LA7841<br>LA7845<br>LA7850<br>LA7851<br>LA7856<br>LA7900<br>LA7905<br>LA7910<br>LA7913<br>LA7920<br>LA7930<br>LA9200N.S/FACE.MNT<br>LA9215<br>LA78045 | LC7822<br>LC7860K.S/MNT<br>LC7880<br>LC7881<br>LC89925<br>LC864508V5A98<br><br>LF347N<br>LF351N<br>LF353N<br>LF356N<br>LF357N<br>LF398N<br>LF441CN<br><br>LM122H<br>LM301AN<br>LM311N<br>LM317K<br>LM317T<br>LM318N<br>LM319N<br>LM323K<br>LM324N<br>LM331N<br>LM337T<br>LM338K<br>LM339N<br>LM340T-5<br>LM340T-12<br>LM431C<br>LM348N<br>LM349N<br>LM350K<br>LM358N-D.I.L<br>LM358-SOP-8P.S/FAC<br>LM359N<br>LM361N<br>LM379S<br>LM380-8P<br>LM380-14P<br>LM381N<br>LM382N<br>LM383T<br>LM384N<br>LM386N<br>LM389<br>LM390N<br>LM392N<br>LM393D.S/FACE.MNT<br>LM393N.8.PIN.DIL<br>LM555CN<br>LM556CN<br>LM567CN<br>LM723CH<br>LM723CN<br>LM725CN<br>LM733CN<br>LM741CN<br>LM747CN<br>LM748<br>LM833<br>LM1011N<br>LM1111CN<br>LM1201N<br>LM1203N<br>LM1205N<br>LM1207N<br>LM1282N<br>LM1496N-14P<br>LM1868<br>LM1871<br>LM1872N<br>LM1875T<br>LM1877N-9<br>LM1881N<br>LM1886N<br>LM1894N<br>LM1895N<br>LM2402T<br>LM2405T<br>LM2407T<br>LM2427T<br>LM2577T<br>LM2901N<br>LM2902N<br>LM2903N<br>LM2904N | LM2907N-8<br>LM2917N-8<br>LM2917N-14<br>LM3086N<br>LM3146N<br>LM3900N<br>LM3911N<br>LM3914N<br>LM3915N<br>LM4250CN<br>LM7000N<br>LM7001<br>LM8363<br>LM8560<br>LM13600N<br><br>LMC555CN<br><br>LMM51413ASP<br><br>LT1071CT<br>LT1084CT<br><br>LTV817B<br><br>M490BB1<br>M491BB1<br>M3872FNB1<br>M5130<br>M5134P<br>M5143P<br>M5144P<br>M5152L<br>M5193P<br>M5194P<br>M5201L<br>M5218L<br>M5218P<br>M5223L-SIL<br>M5223P-DIL<br>M5224P<br>M5227P<br>M5228FP.S/FACE.MNT<br>M5228P<br>M5230L<br>M5236L.TO92L.CASE<br>M5236ML.S/FACE.MNT<br>M5237L.TO92L.CASE<br>M5248P<br>M5269L<br>M5282FP.S/MNT<br>M34300-012SP<br>M37417M4-127SP<br>M37417M4-161SP<br>M37418E6-511SP<br>M50115P<br>M50124-001SP<br>M50431-101SP<br>M50436-560SP<br>M50436-561SP<br>M50455-001SP<br>M50560-001P<br>M50731-610SP<br>M50790SP<br>M51014L<br>M51102L<br>M51131L<br>M51143L<br>M51161P<br>M51164<br>M51202<br>M51207L<br>M51231P<br>M51303P<br>M51308SP<br>M51310AP<br>M51320P<br>M51326P<br>M51353P<br>M51354AP<br>M51365SP<br>M51366SP<br>M51382P<br>M51384AP<br>M51387P<br>M51390ASP | M51392P<br>MC145162P<br>M51393AP<br>M51397AP<br>M51408SP<br>M51413ASP<br>M51454L<br>M51496P<br>M51513L<br>M51521L<br>M51522L<br>M51523AL<br>M51542L<br>M51660L<br>M51712FP.S/FACE.MNT<br>M51712SP.DIL<br>M51721L<br>M51721SL<br>M51728L<br>M51782ASP<br>M51903L<br>M51954AL<br>M51953BL.SIL<br>M51957BL<br>M51977P<br>M51971L<br>M51978P<br>M52038ASP<br>M52326SP<br>M52327SP<br>M52340SP-A<br>M52440ASP<br>M52777SP.B<br>M53216P<br>M53274<br>M54514P<br>M54519P<br>M54523P<br>M54532P<br>M54543AL<br>M54544L<br>M54549L<br>M54564P<br>M54565P<br>M54566P<br>M54573L<br>M54602P<br>M54641L<br>M54644BL<br>M54646AP<br>M54648L-D<br>M54649L<br>M54819L<br>M54832P<br>M54889P<br>M56730ASP<br>M56731SP<br>M56732L<br>M57721<br>M57782<br>M58485P<br>M58653P<br>M58655P<br>M58658P<br>M58659P<br>M62359P<br>M62420SP<br>M66006FP.S/FACE.MN<br>M67754<br><br>MA1050<br>MA2830<br>MA2831<br><br>MB3106<br>MB3712<br>MB3713<br>MB3731<br>MB3732<br>MB3756<br>MB3759.DIL<br>MB3759FP.S/FACE.MN<br>MB4204M<br>MB8841-679J<br>MB8841-1363J<br>MB88301A<br>MB88303<br>MB88305 | MB88401-161K<br>MB88401-206M<br>MB88401-217L<br>MB88401-232M<br>MB88401-233K<br>MB88501-158M<br>MB88501-284M<br>MB88501-448M<br>MB88505-266M<br>MB88521-140M<br>MB88525-152M<br>MB88525-181G<br>MB88536-122L<br><br>MC1327<br>MC1330A2P<br>MC1349<br>MC1352P<br>MC1364<br>MC1377<br>MC1391P<br>MC1458P<br>MC1488P<br>MC1489P<br>MC1496P<br>MC3302P<br>MC3361BP<br>MC3403P<br>MC3423P<br>MC3486N<br>MC3487<br>MC5156<br>MC13020P<br>MC13309T3<br>MC14106BCP<br>MC44603AP<br>MC14410P<br>MC145026P<br>MC145027P<br>MC145028P<br><br>MDA2060<br>MDA2062-ITT<br><br>MK5173N<br><br>MM5316<br>MM5387<br>MM5456N<br><br>MN1220<br>MN1220T<br>MN1225<br>MN1228<br>MN1280<br>MN1430TJ<br>MN2488<br>MN3102<br>MN3207<br>MN6163A<br>MN6168VIA<br>MN14831FVK<br>MN15151TKV<br>MN15245KWC<br>MN15245SAY-1<br>MN15283VJU<br>MN15311VBS<br>MN15362VBR<br>MN15362VBX<br>MN15823VGQ<br><br>MOC3021<br>MOC3041<br>MOC3061<br>MOC8104<br><br> |
|--|---|--|--|--|

|  |  |  |   |   |
|--|--|--|---|---|
| MX5503   | SVI3101D   | SN16848<br>SN29770<br>SN29771BN<br>SN29772<br>SN76115N<br>SN76228N<br>SN76550<br>SN76666   | STK795<br>STK1050A<br>STK1050-2<br>STK1060-2<br>STK1070<br>STK1070-2<br>STK1080-2<br>STK2028<br>STK2029<br>STK2030<br>STK2038<br>STK2040<br>STK2125<br>STK2129<br>STK2139<br>STK2230<br>STK2240<br>STK2250<br>STK2260<br>STK3042-3<br>STK3044<br>STK3062<br>STK3062A<br>STK3062-3<br>STK3082<br>STK3082-2<br>STK3102-2<br>STK3102-3<br>STK3122-3<br>STK3152-3<br>STK4021<br>STK4026<br>STK4026V<br>STK4028V<br>STK4036V<br>STK4036X.(10)<br>STK4038-2<br>STK4040-2<br>STK4042V<br>STK4042XI<br>STK4042-2<br>STK4048-X1<br>STK4101-2<br>STK4111-2<br>STK4112-2<br>STK4121-2<br>STK4122-2<br>STK4131-2<br>STK4132-2<br>STK4141-2<br>STK4141V<br>STK4142-2<br>STK4151-2<br>STK4151V<br>STK4151X<br>STK4152-2<br>STK4161-2<br>STK4161V<br>STK4162-2<br>STK4164-2<br>STK4171-2<br>STK4171V-18.PINS<br>STK4171V-22.PINS<br>STK4172-2<br>STK4181V<br>STK4181-2<br>STK4182-2<br>STK4191V<br>STK4191-2<br>STK4192-2<br>STK4197-2<br>STK4201-2<br>STK4211V<br>STK4211-2<br>STK4221-2<br>STK4221V<br>STK4231-2<br>STK4241-2<br>STK4273<br>STK4274<br>STK4278<br>STK4301<br>STK4311<br>STK4332<br>STK4352<br>STK4362<br>STK4372<br>STK4392<br>STK4412 | STK4432<br>STK4803<br>STK4833<br>STK4843<br>STK4853<br>STK4873<br>STK4893<br>STK4913<br>STK5314<br>STK5325<br>STK5333S<br>STK5335<br>STK5337<br>STK5338<br>STK5339A<br>STK5339B<br>STK5340<br>STK5352<br>STK5361<br>STK5362<br>STK5372H<br>STK5391<br>STK5392<br>STK5421<br>STK5422<br>STK5434<br>STK5441<br>STK5446<br>STK5451<br>STK5471<br>STK5473<br>STK5474<br>STK5476<br>STK5477<br>STK5478<br>STK5481<br>STK5486<br>STK5490<br>STK6324A<br>STK6722H<br>STK6723HZ<br>STK6922<br>STK6922S<br>STK6962<br>STK6972C<br>STK6982B<br>STK6982H<br>STK7216<br>STK7226<br>STK7251<br>STK7308<br>STK7308A<br>STK7309<br>STK7310<br>STK7348<br>STK7356<br>STK7358<br>STK7359<br>STK7404<br>STK7404H<br>STK7406<br>STK7406H<br>STK7408<br>STK7458<br>STK7561J<br>STK7563F<br>STK8250<br>STK8250-2<br>STK8260-2<br>STK73405-2<br>STK73410<br>STK73410-2<br>STK73605<br>STK73908<br>STK79315A |
| NC8061<br>NC8500   | S2560A-2<br>S25610   |  |   |   |
| NE542N<br>NE545B<br>NE555N<br>NE555D-SOP-8P.S/FA<br>NE556<br>NE558C<br>NE645B<br>NE646N<br>NE657N<br>NE5044<br>NE5532P<br>NE5534P<br>NE5535N   | SAA1000<br>SAA1010<br>SAA1024<br>SAA1025<br>SAA1124<br>SAA1290-02<br>SAA1293-03<br>SAA3006P<br>SAA3010P<br>SAA3027P<br>SAA5010<br>SAA5012<br>SAA5020<br>SAA5030<br>SAA5231<br>SAA5243P/E | SS1001   |   |   |
| NJM2606D<br>NJM79M15A<br>NJM2068D<br>NJM2068S.SIL<br>NJM2073D<br>NJM2233S<br>NJM2245L.SIL<br>NJM2352D<br>NJM2904S<br>NJM3403AD<br>NJM3404S<br>NJM4556D<br>NJM4556S<br>NJM4558D<br>NJM4558LD<br>NJM4558S.SIL<br>NJM4559D<br>NJM4560D<br>NJM4562D<br>NJM5532SD | SAB3013<br>SAB3035   | ST02   |   |   |
|  | SAF1032P<br>SAF1039  | STA301A<br>STA321A<br>STA341M<br>STA401A<br>STA403A<br>STA404A<br>STA405A<br>STA431A<br>STA432A<br>STA434A<br>STA441C<br>STA451C<br>STA471A  |   |   |
|  | SAS560S<br>SAS570S<br>SAS580<br>SAS590<br>SAS660<br>SAS670   | STK0029N<br>STK0030<br>STK0039<br>STK0040<br>STK0050<br>STK0055<br>STK0059<br>STK0080<br>STK0080-2<br>STK014<br>STK078<br>STK080<br>STK082<br>STK083G<br>STK084<br>STK084G<br>STK086<br>STK086G<br>STK0177<br>STK392-110<br>STK401-090<br>STK402-040N<br>STK402-070<br>STK402-071<br>STK402-100<br>STK402-120<br>STK405-030<br>STK405-070A<br>STK405-090A<br>STK405-100A<br>STK407-040<br>STK407-050<br>STK407-090<br>STK407-090E<br>STK411-240E |   |   |
|  | SDH209B  |  |   |   |
|  | SE014<br>SE090<br>SE105N<br>SE110N<br>SE115N<br>SE120N<br>SE125N<br>SE130N<br>SE135N<br>SE136N<br>SE139N<br>SE140N   |  |   |   |
| OEC8034  |  |  |   |   |
| PA3012   |  |  |   |   |
| PAL003A<br>PAL005A<br>PAL006A<br>PAL007A   |  |  |   |   |
| PC101<br>PC111S<br>PC113<br>PC120<br>PC121FY<br>PC123<br>PC714<br>PC813<br>PC814<br>PC816<br>PC817   | SF1668   |  |   |   |
|  | SG264<br>SG613<br>SG3081J<br>SG3524<br>SG3525A<br>SG3842   |  |   |   |
| PCA84C440P-401<br>PCA84C443P079-2<br>PCA84C640PSAC2<br>PCA84C640P-015<br>PCA84C640P/030<br>PCA84C640P/049<br>PCA84C640P-133<br>PCA84C640P-158<br>PCA8581P  | SI3052P<br>SI3052V<br>SI3120C<br>SI3122V<br>SI3132V<br>SI3152V<br>SI3922V<br>SI7200M<br>SI7300A<br>SI8053B<br>SI8100D<br>SI18751<br>SI18752  |  |   |   |
| PCF8581P<br>PCF8582AP  |  |  |   |   |
| PQ12RF11<br>PQ12R04  | SK18751<br>SK18752   | STK433<br>STK435<br>STK436<br>STK437<br>STK439<br>STK441<br>STK443<br>STK457<br>STK459<br>STK460<br>STK461<br>STK463<br>STK465<br>STK488-010<br>STK488-020<br>STK488-050<br>STK495-020<br>STK730-060<br>STK730-080<br>STK730-090<br>STK752<br>STK760<br>STK772B<br>STK780  |   |   |
| PS2561.PHOTO.COUPL<br>PS6002A  | SLA4342  |  |   |   |
| PLS105N  | SMR40200-IC<br>SMR40200-KIT  |  |   |   |


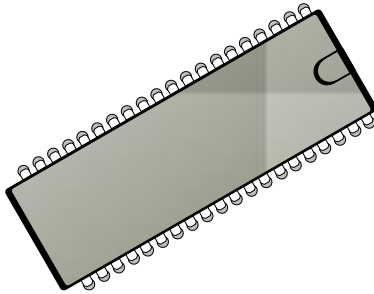


|  |   |  |  |   |
|--|---|--|--|---|
| STR370<br>STR371<br>STR380<br>STR440<br>STR450<br>STR451<br>STR455<br>STR456A<br>STR1096<br>STR1195<br>STR1229<br>STR2012<br>STR2013<br>STR3105<br>STR3125<br>STR3130<br>STR4090A<br>STR4090L<br>STR4090S<br>STR4211<br>STR5015<br>STR5214<br>STR5314<br>STR5394<br>STR5395<br>STR5412<br>STR6020<br>STR9005<br>STR9012<br>STR10006<br>STR11006<br>STR16006<br>STR17006<br>STR20005<br>STR20015<br>STR30115<br>STR30123<br>STR30125<br>STR30130<br>STR30135<br>STR40090<br>STR40115<br>STR41090<br>STR44115<br>STR45111<br>STR50092<br>STR50100<br>STR50103A<br>STR50112A<br>STR50113<br>STR50113-M-KIT<br>STR50115<br>STR50115A<br>STR50115B<br>STR50213<br>STR50215<br>STR50330<br>STR51213<br>STR51330<br>STR51424<br>STR52041<br>STR53041<br>STR54041<br>STR55041<br>STR56041<br>STR58041-IC<br>STR58041-KIT<br>STR59041<br>STR60001<br>STR61001<br>STR80145A<br>STR81145A<br>STR83145<br>STR90120 | STRD6008X<br>STRD6009E<br>STRD6108<br>STRD6601<br>STRD6802<br><br>STRF5653<br>STRF6454<br>STRF6456<br>STRF6523<br>STRF6524<br>STRF6535<br>STRF6552<br>STRF6626<br>STRF6653<br>STRF6654<br>STRF6656<br>STRF6676<br>STRF6707<br>STRF6707A<br><br>STRG6153T<br>STRG6551<br>STRG6651<br><br>STRM6511<br>STRM6523<br>STRM6529<br>STRM6545<br>STRM6546<br>STRM6549<br>STRM6559<br>STRM6811<br>STRM6821A<br><br>STRS5141G<br>STRS5641<br>STRS5707<br>STRS5706<br>STRS5717<br>STRS5741<br>STRS5841<br>STRS5941<br>STRS6301A<br>STRS6307<br>STRS6308<br>STRS6309<br>STRS6525<br>STRS6533<br>STRS6545<br>STRS6706<br>STRS6707<br>STRS6708<br>STRS6708A<br>STRS6709<br>STRS6709A<br>STRS6718<br><br>STRT-G6153<br>STRZ4302<br><br>STV9306<br>STV9379.IC<br>STV9379FA<br>STV9422<br><br>SVI3102D<br>SVI3100A(-B)<br>SVI3101C(-D)<br><br>SVS-866<br><br>SZM137M3<br>SZM-137PV<br>SZM-143RV | TA78L006AP<br>TA79L006P<br>TA1232AN<br>TA7060P<br>TA7061AP<br>TA7061BP<br>TA7071P<br>TA7073AP<br>TA7074P<br>TA7089P<br>TA7092P<br>TA7093P<br>TA7120P<br>TA7122BP<br>TA7130P<br>TA7136AP<br>TA7137<br>TA7140P<br>TA7156<br>TA7157AP<br>TA7170<br>TA7176AP<br>TA7178<br>TA7193AP<br>TA7193P<br>TA7205AP<br>TA7207<br>TA7208P<br>TA7217<br>TA7222AP<br>TA7230P<br>TA7233P<br>TA7238P<br>TA7240<br>TA7241AP<br>TA7245BP<br>TA7245F<br>TA7248P<br>TA7250BP<br>TA7251BP<br>TA7252P<br>TA7256P<br>TA7257P<br>TA7259P<br>TA7262P<br>TA7265AP<br>TA7267P<br>TA7270P<br>TA7271<br>TA7273P<br>TA7274P<br>TA7279P<br>TA7280P<br>TA7281P<br>TA7282AP<br>TA7283P<br>TA7288P<br>TA7291P<br>TA7291S<br>TA7292P<br>TA7299P<br>TA7302P<br>TA7303<br>TA7310P<br>TA7312AP<br>TA7313P<br>TA7315BP<br>TA7317P<br>TA7318P<br>TA7320P<br>TA7321P<br>TA7322P<br>TA7323<br>TA7324P<br>TA7325P<br>TA7328AP<br>TA7331<br>TA7333P<br>TA7335<br>TA7336<br>TA7337P<br>TA7339P<br>TA7342P<br>TA7343P<br>TA7347P<br>TA7348P<br>TA7349P<br>TA7357P | TA7358AP<br>TA7361AP<br>TA7370P<br>TA7374P<br>TA7401AP<br>TA7402P<br>TA8405S<br>TA8406P<br>TA7504P<br>TA7504S<br>TA7506P<br>TA7604AP<br>TA7607AP<br>TA7608CP<br>TA7609P<br>TA7611AP<br>TA7612<br>TA7613<br>TA7616P<br>TA7621P<br>TA7622AP<br>TA7628<br>TA7629P<br>TA7630P<br>TA7632P<br>TA7634AP<br>TA7636<br>TA7639P<br>TA7640AP<br>TA7644CP<br>TA7654AP<br>TA7657P<br>TA7658P<br>TA7666P<br>TA7668BPIC<br>TA7672P<br>TA7673<br>TA7676AP<br>TA7680AP<br>TA7688F.S/FACE.MT<br>TA7688P<br>TA7698AP<br>TA7699AP<br>TA7710P<br>TA7719P<br>TA7731P<br>TA7736F.S/FACE.MNT<br>TA7739P<br>TA7745P<br>TA7750P<br>TA7757P<br>TA7758P<br>TA7769P<br>TA7772P<br>TA7778P<br>TA7784P<br>TA7792F.S/FACE.MNT<br>TA8025F.S/FACE.MNT<br>TA8025P.DIL<br>TA8051P<br>TA8100F.S/FACE.MNT<br>TA8101N<br>TA8102P<br>TA8104F.S/FACE.MNT<br>TA8110AP<br>TA8119P<br>TA8122AN<br>TA8126S.SIL<br>TA8127F.S/FACE.MNT<br>TA8127N<br>TA8164P<br>TA8189N<br>TA8191F.S/FACE.MNT<br>TA8192F.S/FACE.MNT<br>TA8200AH<br>TA8201AK<br>TA8205AH<br>TA8207K<br>TA8210AH<br>TA8211AH<br>TA8213K<br>TA8215H<br>TA8215L<br>TA8216H<br>TA8217P<br>TA8218AH<br>TA8220H<br>TA8221H<br>TA8221AL | TA8225H<br>TA8227P<br>TA8229K<br>TA8232H<br>TA8238K<br>TA8428K<br>TA8251AH<br>TA8255AH<br>TA8256BH<br>TA8268HS<br>TA8401F.S/FACE.MNT<br>TA8402F.S/FACE.MNT<br>TA8403K<br>TA8410K<br>TA8424F.S/FACE.MNT<br>TA8427K<br>TA8432K<br>TA8445K<br>TA8606N<br>TA8607P<br>TA8611AN<br>TA8615N<br>TA8617S<br>TA8628N<br>TA8631N<br>TA8632N<br>TA8637BP<br>TA8644N<br>TA8653N<br>TA8659AN<br>TA8662N<br>TA8690AN<br>TA8691N<br>TA8701N<br>TA8710S<br>TA8718N<br>TA8719AN<br>TA8720AN<br>TA8739P<br>TA8759AN<br>TA8759BN<br>TA8782N<br>TA8822SN<br>TA8844N<br>TA8859CP<br>TA8871N<br>TA8880CN<br>TA31001P<br>TA75339P<br>TA75393P<br>TA75458P.DIL<br>TA75458S.SIL<br>TA75558P.DIL<br>TA75558S.SIL<br>TA75902P<br><br>TAA550<br>TAA570<br>TAA630S<br><br>TB1238AN<br><br>TBA120S<br>TBA120U<br>TBA240<br>TBA331<br>TBA395<br>TBA396<br>TBA440C1<br>TBA440N<br>TBA510<br>TBA520<br>TBA530<br>TBA540<br>TBA570A<br>TBA720A<br>TBA750C<br>TBA750Q<br>TBA760<br>TBA800<br>TBA810AP<br>TBA810S<br>TBA820-8PIN<br>TBA820-14PIN |
|--|---|--|--|---|



|   |   |   |  |   |
|---|---|---|--|---|
| TBA920<br>TBA940<br>TBA970<br>TBA990Q<br>TBA1440G   | TDA1020<br>TDA1024<br>TDA1047<br>TDA1054M<br>TDA1060<br>TDA1082<br>TDA1083<br>TDA1170N<br>TDA1170S<br>TDA1175<br>TDA1175P<br>TDA1180P<br>TDA1190Z<br>TDA1220B<br>TDA1301T.S/FACE.MN<br>TDA1352B<br>TDA1412<br>TDA1420<br>TDA1510A<br>TDA1514A<br>TDA1515BQ<br>TDA1516Q<br>TDA1516BQ<br>TDA1517<br>TDA1518BQ<br>TDA1519<br>TDA1519A<br>TDA1519AQ<br>TDA1519B<br>TDA1521<br>TDA1521A<br>TDA1522<br>TDA1524A<br>TDA1526<br>TDA1540P<br>TDA1541A<br>TDA1545A<br>TDA1552Q<br>TDA1554Q<br>TDA1557Q<br>TDA1558Q<br>TDA1562Q<br>TDA1576<br>TDA1578A<br>TDA1670A<br>TDA1675A<br>TDA1771<br>TDA1870A<br>TDA1904<br>TDA1905<br>TDA1910<br>TDA1940.MEV<br>TDA1940.ITT/TFK<br>TDA1950<br>TDA2002<br>TDA2003<br>TDA2004<br>TDA2005<br>TDA2006<br>TDA2007<br>TDA2008<br>TDA2009A<br>TDA2020<br>TDA2030A<br>TDA2030V<br>TDA2040<br>TDA2050V<br>TDA2052<br>TDA2170<br>TDA2540<br>TDA2540Q<br>TDA2541<br>TDA2541Q<br>TDA2542<br>TDA2545A<br>TDA2545AQ<br>TDA2549<br>TDA2555<br>TDA2560<br>TDA2577A<br>TDA2578A<br>TDA2579A<br>TDA2579B<br>TDA2581<br>TDA2581Q<br>TDA2582<br>TDA2590<br>TDA2591<br>TDA2593 | TDA2595<br>TDA2611A<br>TDA2614<br>TDA2615<br>TDA2616<br>TDA2616Q<br>TDA2750<br>TDA2760<br>TDA2790<br>TDA2791<br>TDA2795<br>TDA2822.16.PIN<br>TDA2822M.8.PIN<br>TDA2840<br>TDA3190<br>TDA3301B<br>TDA3504<br>TDA3505<br>TDA3541<br>TDA3560-PHILLIPS<br>TDA3561A<br>TDA3562A-PHILIPS<br>TDA3562A-SGS<br>TDA3562A-TFK<br>TDA3565<br>TDA3566<br>TDA3566A<br>TDA3576B<br>TDA3603P<br>TDA3651<br>TDA3651A<br>TDA3651AQ<br>TDA3652AQ<br>TDA3653B<br>TDA3653C<br>TDA3653CQ<br>TDA3654.IC<br>TDA3654-KIT.<br>TDA3654Q<br>TDA3800A<br>TDA3800GS<br>TDA3803A<br>TDA3810<br>TDA3857<br>TDA4426A<br>TDA4427<br>TDA4433<br>TDA4437<br>TDA4439-TFK<br>TDA4445B<br>TDA4480<br>TDA4500<br>TDA4501<br>TDA4505E<br>TDA4510<br>TDA4555<br>TDA4556<br>TDA4565<br>TDA4566<br>TDA4580<br>TDA4600<br>TDA4600-2<br>TDA4600-3<br>TDA4601ST.SGS<br>TDA4601-SIE<br>TDA4601B.DIL<br>TDA4601D<br>TDA4605<br>TDA4605-2<br>TDA4605-3<br>TDA4610<br>TDA4650<br>TDA4660<br>TDA4661<br>TDA4662<br>TDA4665<br>TDA4680<br>TDA4681<br>TDA4687<br>TDA4780<br>TDA4800<br>TDA4850<br>TDA4851<br>TDA4852<br>TDA4855<br>TDA4856<br>TDA4858<br>TDA4860<br>TDA4861 | TDA4866<br>TDA4881<br>TDA4885<br>TDA4950<br>TDA5850<br>TDA5930-5<br>TDA6101Q<br>TDA6103Q<br>TDA6106Q<br>TDA6107Q<br>TDA6108JF<br>TDA6111Q<br>TDA6600<br>TDA7000<br>TDA7052<br>TDA7052A<br>TDA7056<br>TDA7056A<br>TDA7057AQ<br>TDA7057Q<br>TDA7072A<br>TDA7073A<br>TDA7211A<br>TDA7222A<br>TDA7230<br>TDA7231A<br>TDA7240A<br>TDA7250<br>TDA7262<br>TDA7263<br>TDA7265<br>TDA7267A<br>TDA7273<br>TDA7274<br>TDA7294<br>TDA7295<br>TDA7296<br>TDA7297<br>TDA7313D.S/MNT<br>TDA7318D<br>TDA7330B<br>TDA7350A<br>TDA7362<br>TDA7365<br>TDA7374B<br>TDA7375<br>TDA7377<br>TDA7381<br>TDA7384<br>TDA7385<br>TDA7386<br>TDA7394<br>TDA7439<br>TDA7496L<br>TDA8133<br>TDA8138<br>TDA8138A<br>TDA8139<br>TDA8140<br>TDA8143<br>TDA8145<br>TDA8146<br>TDA8170<br>TDA8172<br>TDA8174<br>TDA8179S<br>TDA8196<br>TDA8199<br>TDA8213<br>TDA8214B<br>TDA8217<br>TDA8303A<br>TDA8305A<br>TDA8341<br>TDA8841SI<br>TDA8842<br>TDA8843<br>TDA8350Q<br>TDA8351<br>TDA8354Q<br>TDA8356<br>TDA8357J<br>TDA8359J<br>TDA8360<br>TDA8360E<br>TDA8361<br>TDA8361A<br>TDA8361E<br>TDA8362 | TDA8362B<br>TDA8362E<br>TDA8366<br>TDA8370<br>TDA8374<br>TDA8374A<br>TDA8375<br>TDA8375A<br>TDA8380A<br>TDA8395<br>TDA8405<br>TDA8415<br>TDA8416<br>TDA8417<br>TDA8425<br>TDA8440<br>TDA8442<br>TDA8505<br>TDA8540<br>TDA8560Q<br>TDA8561Q<br>TDA8562Q<br>TDA8565Q<br>TDA8567Q<br>TDA8568Q<br><br>TDA8571J<br>TDA8732<br>TDA8741<br>TDA8745<br>TDA8844<br>TDA9102C<br>TDA9103<br>TDA9109<br>TDA9109/SN<br>TDA9160A<br>TDA9178<br>TDA9302H<br>TDA9381PS<br>TDA9800<br>TDA9803<br>TDA9821<br>TDA9840<br>TDA9852<br>TDA9859<br>TDA16833<br>TDA16846P<br><br>TDB1030<br><br>TEA0657<br>TEA0665<br>TEA1014<br>TEA1039<br>TEA1062<br>TEA2014A<br>TEA2018A<br>TEA2024<br>TEA2025<br>TEA2025B<br>TEA2028B<br>TEA2029C<br>TEA2031A<br>TEA2037A<br>TEA2130<br>TEA2164<br>TEA2164N<br>TEA2165<br>TEA2165A<br>TEA2261<br>TEA2262<br>TEA3717DP<br>TEA5101A<br>TEA5101B<br>TEA5114A<br>TEA5170<br>TEA5550<br>TEA5570<br>TEA5581<br>TEA7530DP<br>TEA8172 |
| TC4053BF.S/FACE.MN<br>TC5022BP<br>TC5066BP<br>TC5082P<br>TC5090AP<br>TC5518CFL15.S/FACE<br>TC7129<br>TC8578AP<br>TC9106BP<br>TC9109BP<br>TC9121P<br>TC9123P/BP<br>TC9130P<br>TC9137BP<br>TC9145P<br>TC9146AP<br>TC9147BP<br>TC9148P<br>TC9149P<br>TC9150P<br>TC9152P<br>TC9153AP<br>TC9154AP<br>TC9157AP<br>TC9162N<br>TC9163N<br>TC9164N<br>TC9167P<br>TC9172AP<br>TC9176P<br>TC9177P<br>TC9200AF.S/FACE.MN<br>TC9201BF.S/FACE.MN<br>TC9212P<br>TC9227P<br>TC9245N<br>TC9284BF.S/MNT<br>TC9302AF-011<br>TC9307AF-004.S/FAC<br>TC31018AP<br>TC89101 | TC9123P/BP<br>TC9130P<br>TC9137BP<br>TC9145P<br>TC9146AP<br>TC9147BP<br>TC9148P<br>TC9149P<br>TC9150P<br>TC9152P<br>TC9153AP<br>TC9154AP<br>TC9157AP<br>TC9162N<br>TC9163N<br>TC9164N<br>TC9167P<br>TC9172AP<br>TC9176P<br>TC9177P<br>TC9200AF.S/FACE.MN<br>TC9201BF.S/FACE.MN<br>TC9212P<br>TC9227P<br>TC9245N<br>TC9284BF.S/MNT<br>TC9302AF-011<br>TC9307AF-004.S/FAC<br>TC31018AP<br>TC89101   | TC9123P/BP<br>TC9130P<br>TC9137BP<br>TC9145P<br>TC9146AP<br>TC9147BP<br>TC9148P<br>TC9149P<br>TC9150P<br>TC9152P<br>TC9153AP<br>TC9154AP<br>TC9157AP<br>TC9162N<br>TC9163N<br>TC9164N<br>TC9167P<br>TC9172AP<br>TC9176P<br>TC9177P<br>TC9200AF.S/FACE.MN<br>TC9201BF.S/FACE.MN<br>TC9212P<br>TC9227P<br>TC9245N<br>TC9284BF.S/MNT<br>TC9302AF-011<br>TC9307AF-004.S/FAC<br>TC31018AP<br>TC89101   | TC9123P/BP<br>TC9130P<br>TC9137BP<br>TC9145P<br>TC9146AP<br>TC9147BP<br>TC9148P<br>TC9149P<br>TC9150P<br>TC9152P<br>TC9153AP<br>TC9154AP<br>TC9157AP<br>TC9162N<br>TC9163N<br>TC9164N<br>TC9167P<br>TC9172AP<br>TC9176P<br>TC9177P<br>TC9200AF.S/FACE.MN<br>TC9201BF.S/FACE.MN<br>TC9212P<br>TC9227P<br>TC9245N<br>TC9284BF.S/MNT<br>TC9302AF-011<br>TC9307AF-004.S/FAC<br>TC31018AP<br>TC89101  |   |
| TCA270S<br>TCA280B<br>TCA290A<br>TCA420A<br>TCA440<br>TCA640<br>TCA650<br>TCA730<br>TCA750<br>TCA800<br>TCA810A<br>TCA830S<br>TCA940  | TCA420A<br>TCA440<br>TCA640<br>TCA650<br>TCA730<br>TCA750<br>TCA800<br>TCA810A<br>TCA830S<br>TCA940   | TCA420A<br>TCA440<br>TCA640<br>TCA650<br>TCA730<br>TCA750<br>TCA800<br>TCA810A<br>TCA830S<br>TCA940   | TCA420A<br>TCA440<br>TCA640<br>TCA650<br>TCA730<br>TCA750<br>TCA800<br>TCA810A<br>TCA830S<br>TCA940  |   |
| TCM80A  | TCM80A  | TCM80A  | TCM80A   |   |
| TD6104P<br>TD62083AP<br>TD62105P<br>TD62304P<br>TD62308AP<br>TD62501P<br>TD62706P<br>TD6301AP<br>TD6358N<br>TD6359N<br>TD6360N<br>TD6710AN<br>TD62064AP   | TD62105P<br>TD62304P<br>TD62308AP<br>TD62501P<br>TD62706P<br>TD6301AP<br>TD6358N<br>TD6359N<br>TD6360N<br>TD6710AN<br>TD62064AP   | TD62105P<br>TD62304P<br>TD62308AP<br>TD62501P<br>TD62706P<br>TD6301AP<br>TD6358N<br>TD6359N<br>TD6360N<br>TD6710AN<br>TD62064AP   | TD62105P<br>TD62304P<br>TD62308AP<br>TD62501P<br>TD62706P<br>TD6301AP<br>TD6358N<br>TD6359N<br>TD6360N<br>TD6710AN<br>TD62064AP  |   |
| TDA1001B<br>TDA1010A<br>TDA1011<br>TDA1011A<br>TDA1013A<br>TDA1013B<br>TDA1015<br>TDA1016   | TDA1011<br>TDA1011A<br>TDA1013A<br>TDA1013B<br>TDA1015<br>TDA1016   | TDA1011<br>TDA1011A<br>TDA1013A<br>TDA1013B<br>TDA1015<br>TDA1016   | TDA1011<br>TDA1011A<br>TDA1013A<br>TDA1013B<br>TDA1015<br>TDA1016  |   |



|   |   |   |  |   |
|---|---|---|--|---|
| TL061CN<br>TL062<br>TL071CN<br>TL072CN<br>TL074<br>TL081C<br>TL082<br>TL084CN<br>TL431CP.DIL<br>TL489CP<br>TL494CN<br>TL497ACN<br>TL594CN<br>TL8709P  | UM9151<br><br>UPA53C<br>UPA68H<br>UPA81C<br><br>UPB571C<br><br>UPC17C<br>UPC29C2<br>UPC41C<br>UPC324C<br>UPC339C<br>UPC358C<br>UPC358G.S/FACE.MNT<br>UPC393C<br>UPC494C<br>UPC554C<br>UPC566H<br>UPC574J<br>UPC575C2<br>UPC576H<br>UPC577H<br>UPC585C<br>UPC587C2<br>UPC592H2<br>UPC1018C<br>UPC1020H<br>UPC1024H2<br>UPC1026<br>UPC1028<br>UPC1031H2<br>UPC1032H<br>UPC1094C<br>UPC1094G.S/FACE<br>UPC1095G<br>UPC1154H<br>UPC1158H<br>UPC1161C3<br>UPC1167C2<br>UPC1170H<br>UPC1171C<br>UPC1176C<br>UPC1181H<br>UPC1182H<br>UPC1185H<br>UPC1188H<br>UPC1191V<br>UPC1197<br>UPC1210C<br>UPC1213C<br>UPC1215V<br>UPC1216V<br>UPC1222C<br>UPC1225H<br>UPC1228HA<br>UPC1230H2<br>UPC1237H<br>UPC1238<br>UPC1241H<br>UPC1242H<br>UPC1245V<br>UPC1252H2<br>UPC1263<br>UPC1270<br>UPC1288V<br>UPC1290C<br>UPC1296G<br>UPC1297CA<br>UPC1310V<br>UPC1313HA<br>UPC1316C<br>UPC1318AV<br>UPC1335V<br>UPC1342V<br>UPC1350C<br>UPC1351C<br>UPC1356C2<br>UPC1362C<br>UPC1363C<br>UPC1363CA<br>UPC1364C<br>UPC1373H<br>UPC1377C<br>UPC1378H<br>UPC1379 | UPC1382C<br>UPC1384C<br>UPC1391H<br>UPC1394C<br>UPC1397C<br>UPC1403CA<br>UPC1406HA<br>UPC1420CA<br>UPC1458C<br>UPC1470<br>UPC1474HA<br>UPC1475HA<br>UPC1488H<br>UPC1490HA<br>UPC1498<br>UPC1504C<br>UPC1505C<br>UPC1513HA<br>UPC1514CA<br>UPC1516CA<br>UPC1519HA<br>UPC1524C<br>UPC1525C<br>UPC1526C<br>UPC1534C<br>UPC1536C<br>UPC1571C<br>UPC1605G-S/MOUNT<br>UPC1651G<br>UPC1853CT<br>UPC1891ACY<br>UPC2002<br>UPC2500H<br>UPC2581V<br>UPC4557C<br>UPC4558C<br>UPC4558G.S/FACE<br>UPC4570C.DIL<br>UPC4570G.S/FACE.MN<br>UPC4570HA.SIL<br>UPC7915H<br>UPC7918H<br>UPC14312H<br>UPC14315<br>UPC16315H<br><br>UPD858<br>UPD1987C<br>UPD22100C<br>UPD1701C-011<br>UPD1701C-013<br>UPD1701C-014<br>UPD75008GBE04<br>UPD75106CW-103<br>UPD75208CW-105<br>UPD75208CW-219<br><br>VI614140SA05<br><br>VPG101T<br><br>SHARP.RH-I—<br>X0031CE<br>X0035TA<br>X0037CE<br>X0038TA<br>X0040TA<br>X0043CE<br>X0053CE<br>X0054CE<br>X0062CE<br>X0063CE<br>X0065CE<br>X0104TA<br>X0109CE<br>X0122GE<br>X0129CE<br>X0134GE<br>X0147CE<br>X0191CE<br>X0195CE<br>X0200CE<br>X0203GE<br>X0205CE<br>X0206CE<br>X0214CE<br>X0226GE | X0238CE<br>X0247CE<br>X0250CE<br>X0256CE<br>X0261CE<br>X0262CE<br>X0262GE<br>X0263CE<br>X0274CE<br>X0275CE<br>X0304GE<br>X0305CE<br>X0308CE.SUBSTITUTE<br>X0308-KIT<br>X0308-O.ORIGINAL<br>X0313CE<br>X0319CE<br>X0322GE<br>X0355CE<br>X0365CE<br>X0416AG<br>X0431GE<br>X0439CE<br>X0448GE<br>X0465CE<br>X0506CE<br>X0512CE<br>X0601CE<br>X0602CE<br>X0603CE<br>X0640CE<br>X0689CE<br>X0712CEN1<br>X0715CE<br>X0731CE<br>X0933AF<br>X0986GE<br>X969CEN1<br>X1011CE<br>X1013GE<br>X1040AF<br>X1118CE<br>X1148<br><br>XL24C04P<br><br>XLU2896K.S/FACE.MN<br>XLU2899K.S/FACE.MN<br><br>XRA6435S<br>XRA6439P<br>XRA7039<br><br>Z0032WREO<br><br>14DN332A<br>14DN348E<br>14DN363<br>14DN487<br><br>24C01<br>24C01A<br>24C01B<br>24C02<br>24C02P<br>24C08PC<br>24C16PC | 4558D<br>4558G.S/FACE.MNT<br>4558S<br>6458D<br>6458S<br><br>CMOS-4000<br>4001<br>4002<br>4006<br>4008<br>4009<br>4010<br>4011<br>4013<br>4015<br>4016<br>4017<br>4018<br>4019<br>4020<br>4022<br>4023<br>4024<br>4025<br>4027<br>4028<br>4029<br>4030<br>4033<br>4035<br>4041<br>4046<br>4047<br>4049<br>4050<br>4051<br>4052<br>4053<br>4060<br>4066<br>4066BF.S/MNT<br>4069<br>4070<br>4071<br>4072<br>4073<br>4075<br>4076<br>4077<br>4078<br>4081<br>4082<br>4085<br>4086<br>4093<br>4094<br>4094BCF.S/FACE.MNT<br>4503<br>4510<br>4518<br>4520<br>4528<br>4555<br>4556<br>4584<br>4585<br>40097<br>40106 |
| TLP521<br>TLP581<br>TLP621<br>TLP627<br>TLP632<br>TLP633<br>TLP647G<br>TLP651<br>TLP721<br>TLP732   |   |   |  |   |
| TMP47C434N-3526<br>TMP47C434N-3537<br>TMP47C434N-R214<br>TMP47C434N-R221<br>TMP47C434AN-R231<br>TMP47C634N-2465<br>TMP47C834N-R161<br>TMP47C834N-R165 |   |   |  |   |
| TMS1000N2LL<br>TMS1025N2LL<br>TMS1943N2L<br>TMS1944N2L  |   |   |  |   |
| TSC7106CPL<br>TSC7126   |   |   |  |   |
| U410B<br>U416B<br>U417B<br>U2829B<br>U4614B   |   |   |  |   |
| UA733<br>UA741CN<br>UA747CN   |   |   |  |   |
| UC3524AN<br>UC3842N<br>UC3843N<br>UC3844<br>UC3845<br>UC3846<br>UC3882  |   |   |  |   |
| UHC005  |   |   |  |   |
| ULN2001A<br>ULN2002<br>ULN2003<br>ULN2004<br>ULN2023A<br>ULN2110A<br>ULN2803A   |   |   |  |   |
|    |   |   |  |   |
|   |   |   |  |   |

7400-TTL  
7400N  
7402  
7404  
7405  
7406  
7407  
7425  
7438

74HC00  
74HC02P  
74HC04  
74HC10N  
74HC14P  
74HC74  
74HC85P  
74HC123AN  
74HC139P  
74HC193P  
74HC374P  
74HC573P  
74HCT04E

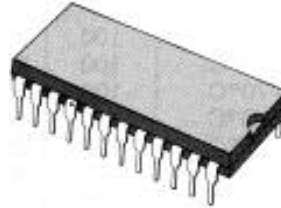
74LS-TYPE  
74LS00  
74LS01P  
74LS02  
74LS03  
74LS04  
74LS08  
74LS10  
74LS21  
74LS27  
74LS28  
74LS32  
74LS47  
74LS74  
74LS86  
74LS90

74LS92  
74LS93  
74LS112  
74LS138  
74LS145  
74LS151  
74LS155  
74LS161  
74LS164  
74LS166  
74LS174  
74LS191  
74LS192  
74LS193  
74LS194  
74LS221  
74LS240  
74LS241  
74LS243  
74LS244  
74LS245  
74LS257  
74LS258AN  
74LS273  
74LS365AN  
74LS373  
74LS374N  
74LS377  
74LS393  
74LS541N



74S-TYPE  
74S00  
74S04  
74S08  
74S11  
74S64  
74S74  
74S112

Z80-TYPE  
Z80A-CPU  
Z80A-CTC  
Z80A-DMA  
Z80AP10



EPROMS  
2764AF1  
27256AF1  
27512F1  
27C256-12  
27C512-10



## AMPLIFIER MODULE

The all new EP22 is a pre-built dual audio power amplifier module. It is designed for high power, low distortion, low noise and very simple installation. This module can operate from 9v to 18v making the EP22 suitable for use in many different replacement or project applications. Only 32 x 36 x 20mm. The IC tag is earthed so it mounts direct to the chassis or heatsink (heatsink not supplied). The IC is a genuine Toshiba Chip boasting impressive performance and phenomenal device protection! (Over voltage, Thermal, Short circuit, etc.) This incredible little module operates in high power BTL mode for a mono output of 22Wrms into 4Ω (11W into 8Ω), or can be quickly modified to operate in stereo mode giving 5.5W x2 into 4Ω (requires 2x 1000µf isolation capacitors). Changing the gain resistors will enable any sensitivity on the input, from mic to CD (pre-set to line level input). You will find the EP22 easy to set up, efficient and stable. Supplied wired in BTL mode, includes instructions. May require additional components depending on application.  
Code EP22

**New Improved**

**HEATSINK REQUIRED!**  
About 5" x 4" or 25cm<sup>2</sup> Surface area

**Mounts Direct to Chassis!**

LINK "A" (NOT CONNECTED)  
GROUND (NOT CONNECTED)  
RF = GAIN RESISTOR  
INPUT L SHORT TO GROUND  
RF = GAIN RESISTOR  
GROUND  
INPUT R

OUTPUT L  
- GROUND  
+ SUPPLY  
- GROUND  
OUTPUT R

SPEAKER 4 OR 8 OHMS

LINE LEVEL AUDIO IN WITH OPTIONAL VOLUME 50K OHM

**HIGH POWER BTL 22W (4ohm)  
MONO OPERATION**

**STEREO MODE  
5.5W X2 INTO 4 ohm**

## COMPONENTS

### DIRECT REPLACEMENT ICs

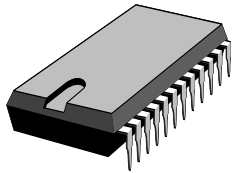
Selected by part number,  
See previous pages.

### ACTIVE COMPONENTS

GP application items,  
See following pages.

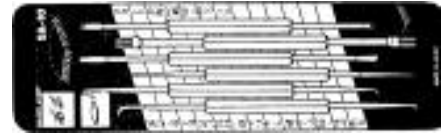
### PASSIVE COMPONENTS

Capacitors, lamps and the like,  
See next section.



## SOLDERING TOOLS

Contains 6 double sided tools designed to carry out repairs professionally & quickly. Suitable for surface mount applications.  
Code SA10



## SERVICE AIDS IN A CAN

*Rework Solder Flux*  
Code SMFL200D

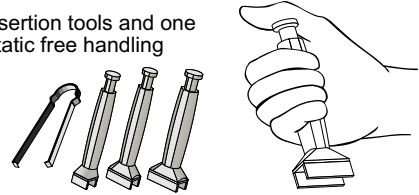
*PCB Cleaner*  
Code RF65

See Section 14



## IC TOOL SET

Consists of three insertion tools and one extraction tool for static free handling of sensitive IC's.  
Code ICT4



## PRESS-TO-RESEAL PLASTIC BAGS

Just like what we supply our parts in. With write-on label.  
Order One To Receive A Bag Of One Hundred.

**120x80mm Small**  
Code PB128

**170x100mm Medium**  
Code PB1710

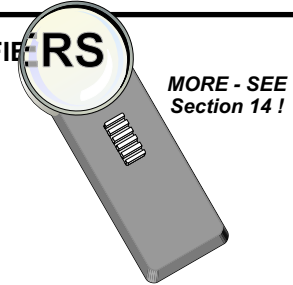


## ILLUMINATED MAGNIFIERS

Can't read the small print?  
**50mm** IMG50

**75mm** IMG75

**110mm** IMG110



**MORE - SEE Section 14!**

## SILICONE HEAT COMPOUND TUBES

Available in 10g & 150g tubes. Essential for maintaining a positive seal between the heat sink, mica and the device. Increases efficiency and prevents thermal runaway.

10g SIL10

150g SIL150

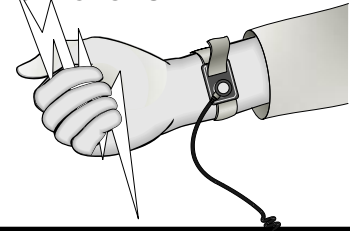


## ELECTROSTATIC PROTECTORS

Don't zap things!

See Section 14 for complete kits!

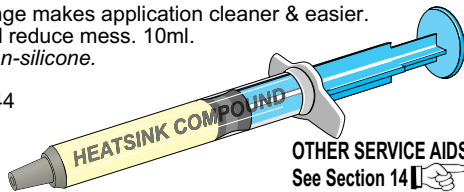
**Wrist Strap**  
Code ASW115



## HEATSINK COMPOUND SYRINGE

The RF44 syringe makes application cleaner & easier. Waste less and reduce mess. 10ml.  
*Non-toxic & Non-silicone.*

Code RF44



**OTHER SERVICE AIDS**  
See Section 14

## SOLDERING FLUX

Size 50ml  
Code BS550

### DISPENSERS

Bottle BOT55E  
Pen PEN200  
See Section 14



## HEAT TRANSFER COMPOUND JAPANESE OEM

### AS USED BY MOST ORIGINAL MANUFACTURERS

**NOTE: SETS HARD LIKE GLUE.**

Thermal failures continuing, even after using quality silicone heat compound, can still occur. This is caused by the heatsinks being just large enough for the very high thermal specification, leaving no overhead! For this situation you must use a very highly specified heat transfer compound. Made in Japan. As used by most OEM.

Size 150g  
Code TSE3843W



## SOLDER

| Code   | Type  | Size  | Roll |
|--------|-------|-------|------|
| RS103  | Rosin | 0.3mm | 100g |
| RS105  | Rosin | 0.5mm | 100g |
| RS208  | Rosin | 0.8mm | 200g |
| RS508  | Rosin | 0.8mm | 500g |
| RS210  | Rosin | 1.0mm | 200g |
| RS510  | Rosin | 1.0mm | 500g |
| RS505C | Synth | 0.5mm | 500g |
| RS507C | Synth | 0.7mm | 500g |
| RS510C | Synth | 1.0mm | 500g |
| RS512C | Synth | 1.2mm | 500g |
| LFS203 | No Pb | 0.3mm | 200g |
| LFS503 | No Pb | 0.3mm | 500g |
| LFS205 | No Pb | 0.5mm | 200g |
| LFS505 | No Pb | 0.5mm | 500g |
| LFS207 | No Pb | 0.7mm | 200g |
| LFS507 | No Pb | 0.7mm | 500g |
| LFS210 | No Pb | 1.0mm | 200g |
| LFS510 | No Pb | 1.0mm | 500g |

See Section 14 for details...



## SEMICONDUCTOR WORLD DATA BOOKS

On how many occasions have you looked at a semiconductor and wondered if it is a transistor, triac or SCR ? Have you spent valuable time going through various data books looking for clues? Now we have the data books you require. These are in ALPHA-NUMERIC order regardless of whether the device is a transistor, semiconductor, SCR, TRIAC, IC or diode. The listing consists of a short description and where known, possible substitutions, thus finding information will be so much easier. Purchase both manuals together for a discount....

Contains listings on devices A.....Z, eg. AD, BC, BCW, BCY, BD, BDW, BF, BLX, BS, BSP, BYW, CCS, FT, HD, HA, KSA, LA, LB, M, MC, MM, MPS, OA, OM, PN, SAB, SE, SFT, ST, TA, TSC, UA and many more.  
Code MAN36



Contains listings on devices 1N.....60,000.....U eg. 1N, 1S, 2N, 2SA, 2SB, 2SC, 2SB, 2SC, 2SD, 2SK, 3SK 3N, UPC and others.  
Code MAN37



## TOWERS' TRANSISTOR SELECTOR

Established as one of the most user friendly short form transistor characteristics/substitution books in the world. There is enough data for the user to determine salient parameters, likely alternatives, manufacturer, mechanical specs, for today and yesterday's discrete bipolar transistors from America, Europe and Asia. Includes surface mount. Developed in the UK. Thousands of items listed.  
Code MAN34



## Electronic Fault Information Library

We have numerous manuals available for the service technician with information on repairing domestic electronics including TV, microwave, audio, video, computer monitors, switch mode power supplies and more! These manuals have been compiled in Australia so their content is totally dedicated to our electronics specifically.  
See Section 14



## EFIL CD-ROM FAULT DATA BASE

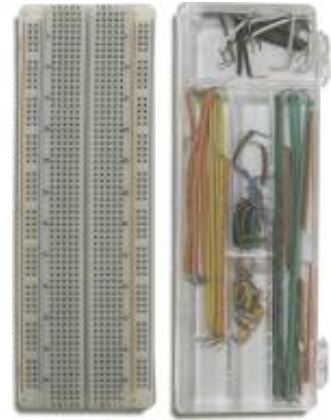
All of this invaluable information is also available on CD-ROM for a computer data base that can also be added to, by you, with those strange faults you come across yourself.  
See Section 14 for more info ->



## PROTOTYPE BREADBOARD KIT

### WITH WIRE KIT

Solderless terminal strip board with standard spacing for designing & experimenting with electronic circuits, etc. Horizontal strips for power and vertical for IC & component insertion. Includes pre-cut jumper lead kit in an easy storage container.  
2.45mm spacing.  
630+200 terminal holes.  
55x165mm. Adhesive back.  
Code U21J



## UNIVERSAL PROTOTYPE PCBs

High quality, pre-drilled fibreglass printed circuit boards for experiments, one-off projects, etc. All use 0.9mm drilled, 2.45mm spacing (10th").

### STRIP BOARDS

Full length tracks.  
Size 250x100mm  
Code PCB119

Size 160x100mm  
Code PCB118

### MATRIX TYPE

Solder your own tracks.  
Size 160x115mm  
Code PCB116

### DIP PACKAGE TYPE

Larger projects with ICs.  
Size 140x110mm  
Code PCB112

### BREAD BOARD TYPE

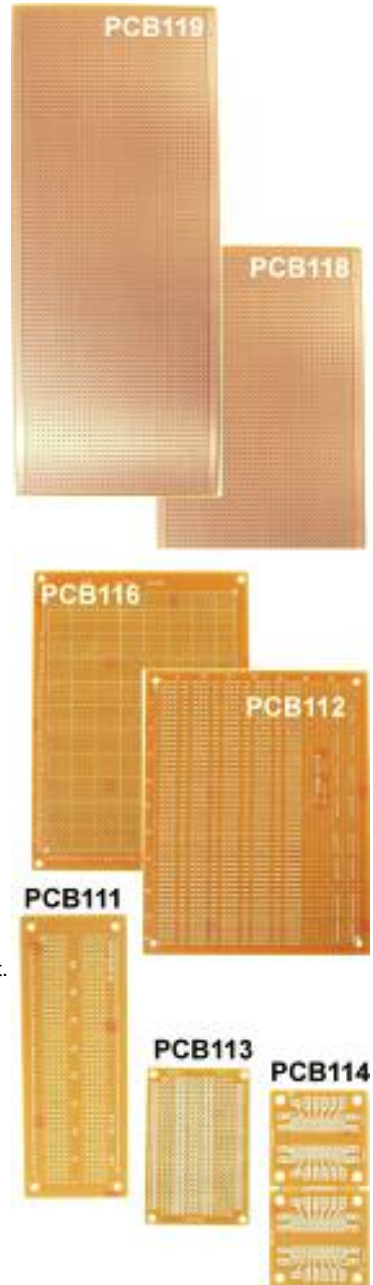
V strips and rails.  
Size 130x47mm  
Code PCB111

### MINI BREAD BOARD

Duplicate your test layout.  
Size 72x47mm  
Code PCB113

### SINGLE DIP TYPE

Split board for IC.  
Size 45x45mm x2  
Code PCB114





## MICA WASHER

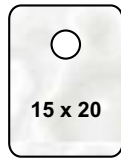
Heat resistant mica washers for transistor and IC placement. Don't forget the Silicone heat compound. Its important! Outer dimensions may differ slightly on stock.  
**NOTE: ORDER ONE TO RECEIVE A PACK OF TEN**

Suit Tags, etc.  
 Code YC18



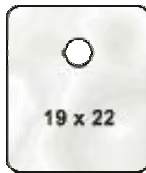
12 X 3

Suit TO220 etc.  
 Code YC16



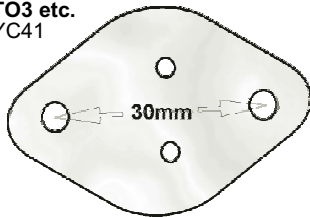
15 x 20

Suit TO220 etc.  
 Code YC35



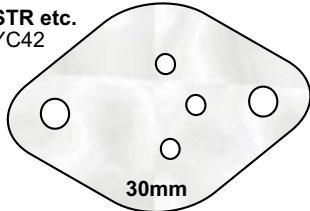
19 x 22

Suit TO3 etc.  
 Code YC41



30mm

Suit STR etc.  
 Code YC42



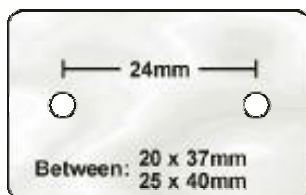
30mm

Suit MT100, etc.  
 Code YC23



25 x 38mm

Suit MT200 etc.  
 Code YC90

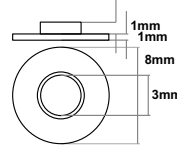
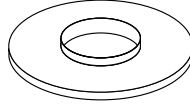


Between: 20 x 37mm  
 25 x 40mm

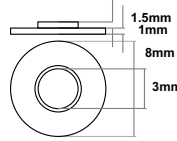
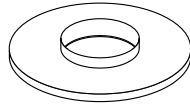
## INSULATOR WASHERS

Heat resistant plastics. Suit most transistor and IC mountings. Outer lip dimensions may differ slightly from stock.  
**NOTE: ORDER ONE TO RECEIVE A PACK OF TEN**

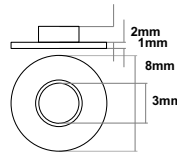
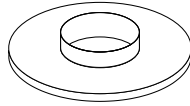
1mm WASHER  
 Code YC20



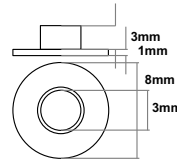
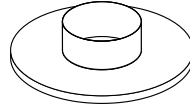
1.5mm WASHER  
 Code YC13



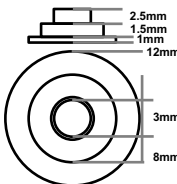
2mm WASHER  
 Code YC31



3mm WASHER  
 Code YC10



STEPPED WASHER  
 Code YC12



**DONT FORGET !**  
**Heat Transfer Compound**  
 General Purpose Tubes  
 10g SIL10  
 150g SIL150

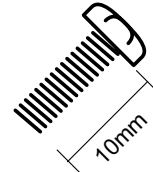
Syringes  
 10ml RF44  
 35ml HTC35SL



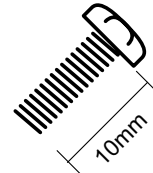
## HARDWARE

Miscellaneous Nuts & Bolts suitable for heat sink applications.  
**NOTE: ORDER ONE TO RECEIVE A PACK OF TEN**

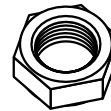
PLASTIC SCREW  
 Code YC80



METAL SCREW  
 Code YC81

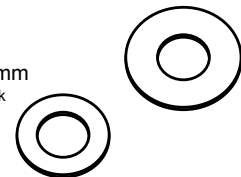


METAL NUT  
 Suit above nuts.  
 Code YC85



METAL WASHER  
 Code YC83

I/D 3mm  
 O/D 6 to 8mm  
 Depending on stock



SPRING WASHER  
 Code YC84



TAGGED WASHER  
 Code YC86

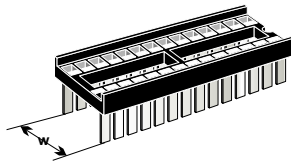


"ONCER" NUT  
 Push-On Fixing  
 Code YC87



## LOW PROFILE IC SOCKETS

| PINS | W mm | CODE   |
|------|------|--------|
| 8    | 7.5  | ICS8   |
| 14   | 7.5  | ICS14  |
| 16   | 7.5  | ICS16  |
| 18   | 7.5  | ICS18  |
| 20   | 7.5  | ICS20  |
| 22   | 7.5  | ICS22  |
| 24   | 15   | ICS24  |
| 24   | 7.5  | ICS24S |
| 28   | 15   | ICS28  |
| 28   | 7.5  | ICS28S |
| 32   | 15   | ICS32  |
| 40   | 15   | ICS40  |
| 42   | 15   | ICS42  |

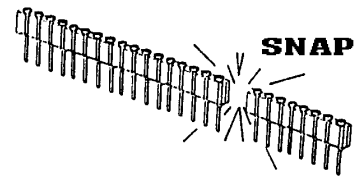


## IC SOCKET PINS

Simply cut to size.  
Gold plated contacts.

20 pin ICP20

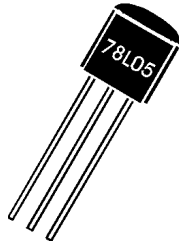
32 pin ICP32



## VOLTAGE REGULATORS TO92 100mA

### CODE VOLTAGE

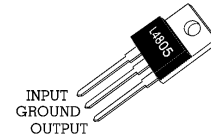
|       |     |
|-------|-----|
| 78L05 | +5  |
| 78L06 | +6  |
| 78L08 | +8  |
| 78L09 | +9  |
| 78L12 | +12 |
| 78L15 | +15 |
| 79L05 | -5  |
| 79L06 | -6  |
| 79L08 | -8  |
| 79L09 | -9  |
| 79L12 | -12 |
| 79L15 | -15 |



## VERY LOW DROP REGULATORS TO220 400mA

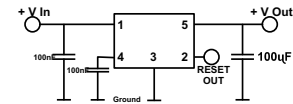
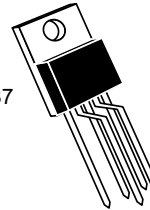
Designed for use in automotive & other applications where 0.4V in/out drop is required. Thermal, Over/Reverse V protected.

| Code  | Voltage |
|-------|---------|
| L4805 | +5      |
| L4885 | +8.5    |
| L4810 | +10     |



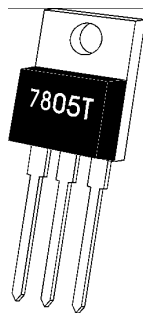
## VERY LOW DROP WITH RESET TO220 500mA

0.4V drop, with power on/off reset.  
+5V L487



## VOLTAGE REGULATORS TO220 1A

|       |          |
|-------|----------|
| 7805T | +5 volts |
| 7806T | +6       |
| 7808T | +8       |
| 7809T | +9       |
| 7812T | +12      |
| 7815T | +15      |
| 7818T | +18      |
| 7824T | +24      |
| 7905T | -5       |
| 7906T | -6       |
| 7908T | -8       |
| 7909T | -9       |
| 7912T | -12      |
| 7915T | -15      |
| 7918T | -18      |
| 7924T | -24      |



**NEW! 3A 5V**  
HIGH POWER 7805  
Code LM323K

## SMD 5V VOLTAGE REGULATOR

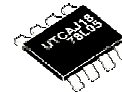
5V 50mA  
Code 78LR05

- 1 - INPUT 35Vmax
- 2 - DELAY CAP
- 3 - GROUND
- 4 - RESET OUTPUT
- 5 - REG. OUTPUT



### 8 PIN VERSION

5V 100mA  
Code 78L05-SOP-8P



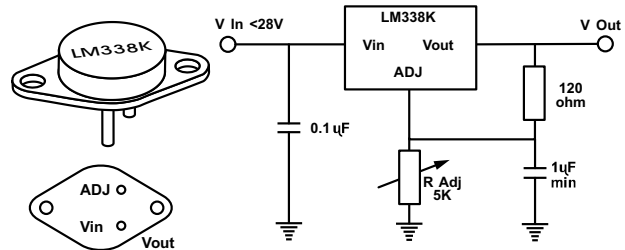
## VARIABLE VOLTAGE REGULATOR 5A TO3

A remarkable device, with minimum external components, a variable output voltage of 1.2 to 32 volts is possible.

Vin Max 40V, Iout Max 5 Amp.

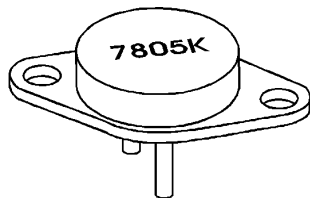
Code LM338K

$$V_{out} = 1.25 \text{ to } 32 \text{ Volt} = (1.25) \left[ \frac{R1+R2}{R1} \right] + \text{Adj } (R2)$$



## VOLTAGE REGULATORS TO3 1.5A

|       |     |
|-------|-----|
| 7805K | +5  |
| 7812K | +12 |
| 7815K | +15 |
| 7905K | -5  |
| 7912K | -12 |
| 7915K | -15 |



## PANASONIC INVERTER OVEN KIT

### TWO TRANSISTOR OEM K

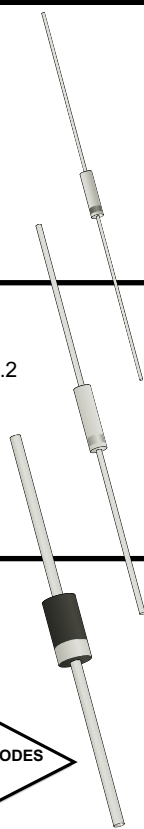
P/No. A691E4V10GP  
Q701 GT60N321 (G60N9)  
Q702 1M30D  
C806 56pF (Update)  
Sold together as a kit  
Code KIT691



### ZENER DIODES 0.5W

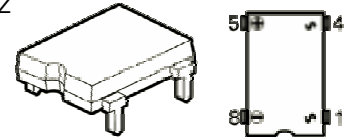
3.3 3.6 3.9 4.3 4.7 5.1 5.6 6.2 6.8 7.5 8.2  
9.1 10 11 12 13 15 16 18 20 22 24 27 30  
33 36 39 43 47 51 56 62 68 75 Volts.

Order as follows -  
.5 watt = .5Z + voltage, eg:  
Code .5Z3.3



### RECTIFIER BLOCK

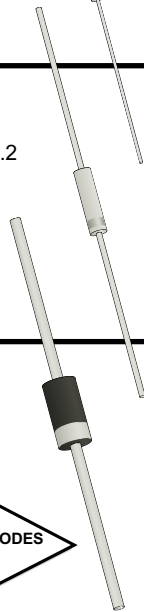
Used in VCRs etc.  
Sharp RHD X0083GEZZ  
Code SIWBA60S



### ZENER DIODES 1W

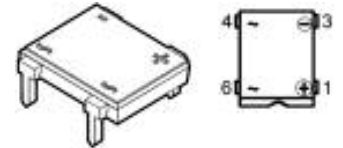
2.7\* 3.3 3.6 3.9 4.3 4.7 5.1 5.6 6.2 6.8 7.5 8.2  
9.1 10 11 12 13 15 16 18 20 22 24 27 30  
33 36 39 43 47 51 56 62 68 75 Volts.

Order as follows -  
1 watt = 1Z + voltage, eg:  
Code 1Z75  
\*NOTE 1Z2.7



### RECTIFIER BLOCK

1.5A, 200V, SMD Type  
Code D1102S



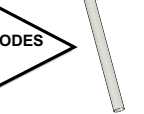
1.5A, 600V (DF06)  
Code D1106

### ZENER DIODES 5W

3.9 4.3 4.7 5.1 5.6 6.2 6.8 7.5 8.2 9.1  
10 11 12 13 15 16 18 20 22 24 27 30  
33 36 39 43 47 51 56 62 68 75 91 Volts.

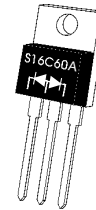
Order as follows -  
5 watt = 5Z + voltage, eg:  
Code 5Z91  
Code 5Z3.9

MORE ZENER DIODES  
SEE NEXT PAGE



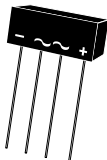
### DIODE PACK

16 AMPS, 60 VOLTS  
Neg. S16C60A



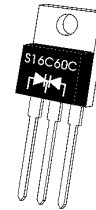
### BRIDGE RECTIFIERS FLAT-PACK

| Code   | PIV  | Vrms | AMP |
|--------|------|------|-----|
| KBP152 | 200  | 140  | 1.5 |
| KBP156 | 600  | 420  | 1.5 |
| KBL404 | 400  | 280  | 4   |
| KBL406 | 600  | 420  | 4   |
| KBU602 | 200  | 140  | 6   |
| KBU606 | 600  | 420  | 6   |
| BL2-10 | 1000 | 700  | 2   |



### DIODE PACK

16 AMPS, 60 VOLTS  
Pos. S16C60C



### BRIDGE RECTIFIERS HEAVY-DUTY

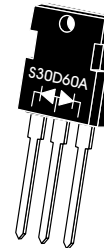
420Vrms 35A  
PIV 600V  
Code BP35-06



420Vrms 50A  
PIV 600V  
Code BP50-06

### DIODE PACK

30 AMPS, 60 VOLTS  
Neg. S30D60A



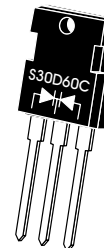
### BRIDGE RECTIFIERS BLOCK-PACK

| Code  | PIV | Vrms | AMP |
|-------|-----|------|-----|
| W005  | 50  | 35   | 1.5 |
| W02   | 200 | 140  | 1.5 |
| W06   | 600 | 420  | 1.5 |
| SB305 | 50  | 35   | 3   |
| SB320 | 200 | 140  | 3   |
| SB360 | 600 | 420  | 3   |
| SB601 | 50  | 35   | 6   |
| SB603 | 200 | 140  | 6   |
| SB605 | 600 | 420  | 6   |

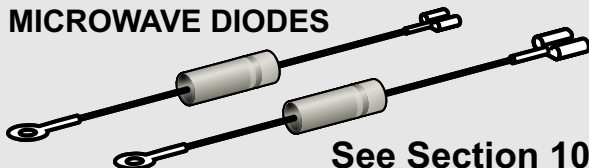


### DIODE PACK

30 AMPS, 60 VOLTS  
Pos. S30D60C



### MICROWAVE DIODES



See Section 10

### PANASONIC MICROWAVE RECTIFIER

As used in the newer  
"Inverter" type ovens.  
AESTRBV6206  
Code D20XB60



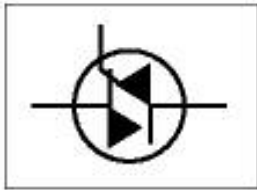
Other Panasonic Inverter  
SMPS parts - See Section 10

## GENERAL PURPOSE TRIACS

|           |          |
|-----------|----------|
| BTB04-400 | 4A 400V  |
| BTB04-600 | 4A 600V  |
| BTB06-400 | 6A 400V  |
| BTB06-600 | 6A 600V  |
| BTB08-400 | 8A 400V  |
| BTB08-600 | 8A 600V  |
| BTB10-400 | 10A 400V |
| BTB10-600 | 10A 600V |
| BTB12-400 | 12A 400V |
| BTB12-600 | 12A 600V |
| BTB12-700 | 12A 700V |
| BTB16-400 | 16A 400V |
| BTB16-600 | 16A 600V |
| BT136-800 | 4A 800V  |
| BT137-500 | 8A 500V  |
| BT137-800 | 8A 800V  |
| BT138-800 | 12A 800V |
| BT139-800 | 16A 800V |
| BT151-500 | 12A 500V |

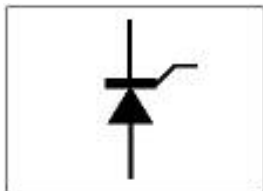
## INSULATED TYPES

|            |         |
|------------|---------|
| BTA10-600C | 10A 600 |
| BTA10-700C | 10A 700 |
| BTA12-400C | 12A 400 |
| BTA16-600  | 16A 600 |
| BTA40-700B | 40A 700 |



## THYRISTORS, TRIACS and SCRs


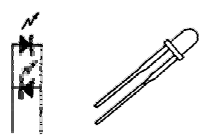



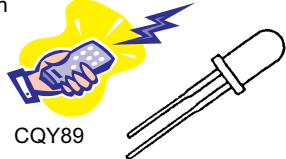

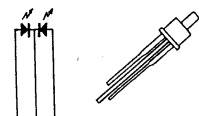
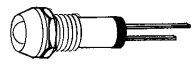

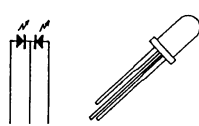
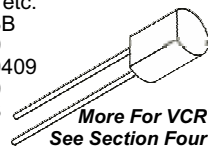

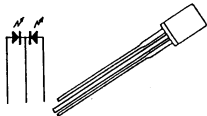
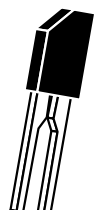

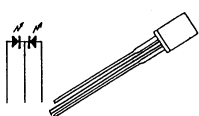
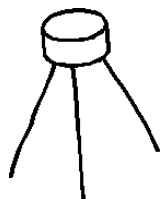


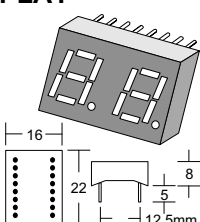
|            |                         |
|------------|-------------------------|
| 2P5M       | THYRISTOR 500V 2A       |
| AC03E      | TRIAC                   |
| AC08DGM    | TRIAC                   |
| BCR1AM-12  | TRIAC 600V 1A           |
| BCR3AM-8   | TRIAC 400V 3A           |
| BCR3AM-12  | TRIAC 600V 3A           |
| BCR5AM-12  | TRIAC 600V 5A           |
| BCR6AM-12L | TRIAC 600V 6A           |
| BCR8PM-12L | TRIAC 600V 8A           |
| BT100      | THYRISTOR 500V 5A       |
| BTA08-600C | TRIAC 600V 8A           |
| BR101      | TETRODE 50V 0.175A      |
| BR203      | THYRISTOR 30V 1A        |
| BRY55-400  | 400V 0.8A               |
| BSTCC0146H | Discontinued use 15-80H |
| BSTCC0146R | Discontinued use 15-85R |
| SF2D41     | SCR 200V 2A             |
| SG264      | SCR 30V 15A 50W         |
| SG613      | THYRISTOR               |
| 2SF248     | SCR 200V 6.4A           |
| C106D      | THYRISTOR 400V 2A       |
| C106M      | THYRISTOR 600V 2A       |
| 3P4MH      | THYRISTOR 400V 3A       |
| 5P4M       | THYRISTOR 400V 5A       |
| 5P6M       | THYRISTOR 600V 5A       |
| 15-80H     | THYRISTOR               |
| 15-85R     | THYRISTOR               |
| SC141D     | TRIAC 6A 400V           |



## DIODE

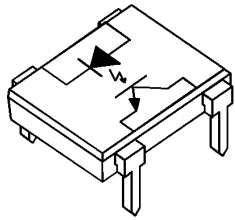
|            |   |
|------------|---|
| Code       | Germanium (Gi) 50mA 50V                           |
| 1N60       | 75V 150ma High speed switching                    |
| 1N914B     | 1A 50V Use 1N4002                                 |
| 1N4001     | 1A 200V General Purpose/Rectifier Diode           |
| 1N4002     | 1A 400V General Purpose/Rectifier Diode           |
| 1N4004     | 1A 1000V General Purpose/Rectifier Diode          |
| 1N4007     | 0.2A 100V 4nS Fast recovery                       |
| 1N4148     | 1 A 600V Fast recovery                            |
| 1N4937     | 3A 400V General Purpose/Rectifier Diode           |
| 1N5404     | 3A 1000V General Purpose/Rectifier Diode          |
| 1N5408     | Schottky-Gi 40V 1A                                |
| 1N5819     | Dem, Uni, 35V, 0.1A eq, BA147/50/87-90, 1N5606-09 |
| 1S1555     | 600V 1A Fast recovery BY126/7, 33-35,             |
| 1S1888     | 0.12A 55V 4nS Fast recovery                       |
| 1S2472     | S, 35V, 0.1A, 100nS                               |
| 1SS53      | S, 100V, 0.1A, 100nS                              |
| 1SS55      | 0.2A 250V Fast recovery                           |
| 1SS82      | 35V 100ma Band switching                          |
| 1SS110     | 0.11A 40V 4nS Fast recovery                       |
| 1SS133     | Yellow 50V 250mW 1.5nS Switching Diode            |
| 1SS254     | Thyristor 500V 2A                                 |
| 2P5M       | Microwave A606V4760JP, A606V5110BP                |
| 2X062H     | 1000V 1A Valley point current diode               |
| BA159      | 0.25A 250V Switching Diode                        |
| BAV21      | 1,200V 1A General Purpose                         |
| BY127      | 1,600V 2.5mA General Purpose                      |
| BY176      | TV Rectifier 1500/1800V, 5mA                      |
| BY184      | 1.2A 50V Special Purpose                          |
| BY188      | TV Rectifier 400ma 350V                           |
| BY206      | 1.5A 1200V TV Damper Diode                        |
| BY227      | 1.75A 1500V TV Damper Diode                       |
| BY228      | 7A 600V TV Damper Diode                           |
| BY229-600  | 7A 800V TV Damper Diode                           |
| BY229-800  | 7A 1000V TV Damper Diode                          |
| BY229-1000 | 6.5A 600V Power Stage Rectifier Diode             |
| BY249-600  | 2A 800V TV Fast recovery                          |
| BY299      | 7A 1200V TV Damper, 150nS                         |
| BY329-1200 | 7A 1500V TV Damper, 15nS                          |
| BY359-1500 | 3A 800V TV Fast recovery                          |
| BY399      | Use BYV95C  |
| BY407      | 5A 200V Rectifier Diode                           |
| BY550-200  | 5A 400V Rectifier Diode                           |
| BY550-400  | 5A 600V Rectifier Diode                           |
| BY550-600  | TV-Gi 5mA 1800V 200nS Fast recovery               |
| BY584      | 200V 0.4A SiDi Cont'Av' 300nS                     |
| BYD33D     | 600V 1.5A SiDi Cont'Av' 250nS                     |
| BYV95C     | 1000V 1A Controlled avalanche Diode               |
| BYV96E     | 600V 3A Controlled avalanche Diode                |
| BYW95C     | 1000V 3A Controlled avalanche Diode               |
| BYW96E     | Use BY229-600                                     |
| BYX71-600  | 1000V 3A Fast recovery                            |
| FR307      | 1000V 6A Fast recovery                            |
| FR607      | 350mA 12000V Diode                                |
| HV05-12    | Microwave replacement for 2X062H                  |
| HV6X2P     | Microwave 9KV 350mA                               |
| HVR1X4     | 0.1A 35V 10nS Fast recovery                       |
| MA165      | 0.2A 40V 20nS Fast recovery                       |
| MA171      | 40V 200mA Si Switching Diode                      |
| MA178      | 200V 200mA Si Switching Diode                     |
| MA185      | 20v 1w Zenner                                     |
| MA2200     | 80v 2A 5 Watt UHF/VHF antennae sw                 |
| MI301      | Ge Sig' Diode Vid-Dem, n-ohm, 30V, 30mA           |
| OA90       | Ge Signal Diode Uni, 115V, 50mA                   |
| OA91       | 1500V 0.8A Fast recovery                          |
| RH2F       | 1500V 2.5A-IF(AV) 5A-IFSM                         |
| RH3F       | 173V Zenner                                       |
| R2K        | Sharp TV RHEX0397CEZZ                             |
| R2KN       | Sharp Protection Diode                            |
| R2KS       | 130V Protection diode                             |
| R2KY       | 200V Protection diode                             |
| RY23       | 400V Protection diode                             |
| RY24       | Use RH2F  |
| 2B2C       | SR2 or SR2M Use R2KY                              |
| UX-C2B     | Microwave Stack Diode A6202-4N10T                 |
| ZA017      | FH-DZA017WREO DIODE ASSEMBLY                      |
| ZA018      | For more Microwave Diodes see Sect10              |



|   |   |  |
|---|---|--|
| <p><b>2mm TIP LED</b></p>  <p>LED2R RED<br/>LED2G GREEN<br/>LED2Y YELLOW</p>  | <p><b>3mm GREEN / RED</b></p>  <p>LED3GR</p>  | <p><b>5mm 2Hz FLASHING DIODE</b></p> <p>2-15Vdc</p> <p>Green LED5GF<br/>Red LED5RF</p>   |
| <p><b>3mm LED</b></p>  <p>LED3R RED<br/>LED3G GREEN<br/>LED3Y YELLOW<br/><i>High Bright - See Below</i></p>  | <p><b>5mm GREEN / RED</b></p>  <p>LED5GR</p>   | <p><b>IR EMITTER DIODE</b></p> <p>As used in remote controls etc.</p>  <p>Code CQY89</p>  |
| <p><b>3mm BRIGHT LED</b></p>  <p>LED3BR RED 850 mCd<br/>LED3BG GREEN 500 mCd<br/>LED3BY YELLOW 500 mCd</p>   | <p><b>3mm GREEN / RED</b><br/>(Both=Yellow)</p>  <p>LED3GRY</p>  | <p><b>CHROME BEZEL 12 Volt</b></p> <p>LED with resistor.<br/>Suit 8mm diam' hole.</p> <p>Red PL6R<br/>Green PL6GN<br/>Yellow PL6YL</p>    |
| <p><b>4mm LED</b></p>  <p>LED4R RED<br/>LED4G GREEN<br/>LED4Y YELLOW</p>  | <p><b>5mm GREEN / RED</b><br/>(Both=Yellow)</p>  <p>LED5GRY</p>   | <p><b>IR RECEIVER DIODE</b></p> <p>Suit VCR, TV, Audio, etc.<br/>NAT PN323B<br/>PH310<br/>AKAI ED360409<br/>Equiv. PH310<br/>Code PN323</p>  <p><i>More For VCR See Section Four</i></p> |
| <p><b>5mm LED</b></p>  <p>LED5R RED<br/>LED5G GREEN<br/>LED5Y YELLOW<br/><i>High Bright - See Below</i></p>  | <p><b>2x5mm GREEN / RED</b><br/>(Both=Yellow)</p>  <p>LED25GRY</p>   | <p><b>IR RECEIVER DIODE</b></p> <p>Primarily used in learning remote controls, etc., etc.... Will suit other applications.<br/>Code BPW50</p>   |
| <p><b>5mm BRIGHT LED</b></p>  <p>LED5BR RED 350 mCd<br/>LED5SBR RED 850 mCd<br/>LED5UBR RED 1800 mCd<br/>LED5BG GREEN 200 mCd<br/>LED5BY YELLOW 660 mCd<br/>LED5SBY YELLOW 900 mCd</p> | <p><b>2x5mm GREEN / YELLOW</b></p>  <p>LED25GY</p>   | <p><b>PHOTO TRANSISTOR</b></p> <p>Light sensitive receiver transistor</p> <p>Code MEL12</p>   |
| <p><b>2x5mm LED</b></p>  <p>LED25R RED<br/>LED25G GREEN<br/>LED25Y YELLOW</p>  | <p><b>LED PANEL MOUNT CLIP</b></p> <p>Suit 5mm LED's. 6.2mm bezel with locking washer for a more secure hold of the LED to the panel assembly (2.8mm max thick).<br/>MTG5</p>  | <p><b>TWO DIGIT DISPLAY</b></p> <p><b>COMMON ANODE</b><br/>As used in TV, VCR, etc.<br/>Green LED402<br/>Red LED442</p>   |

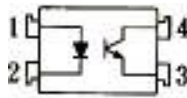
### PHOTO-OPTOCOUPLER - COSMO

The alternative in opto-couplers,  
*To Save You Money!*  
Equivalent specs' or better to listed substitute part numbers. Cosmo.  
With all approvals.



### PHOTO-OPTOCOUPLER 4 PIN

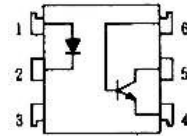
Suit PC817,  
PS2501, 2561,  
TLP421, 521, 621,  
SFH610, 611, 615,  
SFH618, 628  
H11A817, and more.  
Code K1010



If . . . . . 50mA  
Viso . . . . . 5KV  
Vceo . . . 60Vrms  
CTR . . . . . 50%  
I<sub>r</sub> . . . . . 2mA  
Tr . . . . . 5μs  
RI . . . . . 100Ω

### PHOTO-OPTOCOUPLER 6 PIN

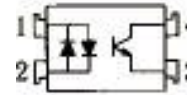
PC4N35, PS2601  
4N35, 36, 37, 38,  
TLP331, 531, 631,  
SFH600, 601, 608,  
MCT2, 5210, 5211,  
H11A1, and more.  
Code K2010



If . . . . . 50mA  
Viso . . . . . 5KV  
Vceo . . . 60Vrms  
CTR . . . . . 60%  
I<sub>r</sub> . . . . . 2mA  
Tr . . . . . 5μs  
RI . . . . . 100Ω

### PHOTO-OPTOCOUPLER 4 PIN AC

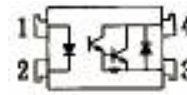
Suit PC814,  
PS2505, 2565,  
TLP620, 626,  
SFH620,  
LTV814,  
H11AA814, and more.  
Code K3010



If . . . . . 60mA  
Viso . . . . . 5KV  
Vceo . . . 60Vrms  
CTR . . . . . 60%  
I<sub>r</sub> . . . . . 1mA  
Tr . . . . . 5μs  
RI . . . . . 100Ω

### PHOTO-OPTOCOUPLER 4 PIN B

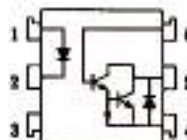
Suit PC852,  
PS2532,  
TLP523,  
TLP627,  
SFH619,  
and more.  
Code K4010



If . . . . . 50mA  
Viso . . . . . 5KV  
Vceo 300Vrms  
CTR . . . . . 600%  
I<sub>r</sub> . . . . . 1mA  
Tr . . . . . 60μs  
RI . . . . . 100Ω

### PHOTO-OPTOCOUPLER 6 PIN B

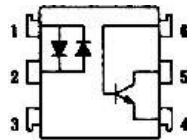
Suit PC852,  
TLP371,  
IL66-4,  
H11B1,  
MOC119, 8020,  
and more.  
Code K5010



If . . . . . 50mA  
Viso . . . . . 5KV  
Vceo 300Vrms  
CTR . . . . . 600%  
I<sub>r</sub> . . . . . 1mA  
Tr . . . . . 60μs  
RI . . . . . 100Ω

### PHOTO-OPTOCOUPLER 6 PIN AC

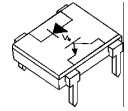
PC733, PS2605  
TLP330, 630,  
H11AA1, 2, 3, 4,  
IL250, 251  
IL252, 255,  
and more.  
Code K6010



If . . . . . 50mA  
Viso . . . . . 5KV  
Vceo . . . 60Vrms  
CTR . . . . . 60%  
I<sub>r</sub> . . . . . 1mA  
Tr . . . . . 5μs  
RI . . . . . 100Ω

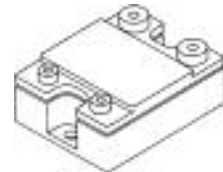
### PHOTO-OPTOCOUPERS - OEM

| CODE    | Isolation V | O/P Device             | I/TX% | BV | CEO |
|---------|-------------|------------------------|-------|----|-----|
| 4N25    | 1775        | Transistor             | 20    | 30 | 30  |
| 4N26    | 1060        | Transistor             | 20    | 30 | 30  |
| 4N28    | 350         | Transistor             | 10    | 30 | 30  |
| 4N35    |             | Transistor             | 100   | 30 | 30  |
| 4N36    |             | Transistor             |       |    |     |
| 4N38A   | 1770        | Transistor-H.V.        | 10    | 80 |     |
| ON3105  |             | As used in videos etc. |       |    |     |
| ON3171  |             | As used in videos etc. |       |    |     |
| PC101   |             | As used in videos etc. |       |    |     |
| PC111S  |             | As used in videos etc. |       |    |     |
| PC113   |             | As used in videos etc. |       |    |     |
| PC120   |             | As used in videos etc. |       |    |     |
| PC121FY |             | As used in videos etc. |       |    |     |
| PC123   |             | As used in videos etc. |       |    |     |
| PC714   |             | As used in videos etc. |       |    |     |
| PC813   |             | As used in videos etc. |       |    |     |
| PC814   |             | As used in videos etc. |       |    |     |
| PC816   |             | As used in videos etc. |       |    |     |
| PC817   |             | As used in videos etc. |       |    |     |



### SOLID STATE RELAY 10A 250VAC

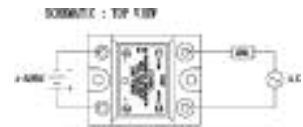
V<sub>s</sub> 4→32Vdc  
I<sub>s</sub> 12→5mA  
V<sub>out</sub> 250Vrms (AC Only)  
I<sub>out</sub> 10Arms  
V<sub>iso</sub> 4000Vac  
R<sub>iso</sub> 10GΩ  
Code KSD210AC8



[www.wescomponents.com/DataSheets/KSD210AC8.pdf](http://www.wescomponents.com/DataSheets/KSD210AC8.pdf)

### SOLID STATE RELAY 40A 250VAC

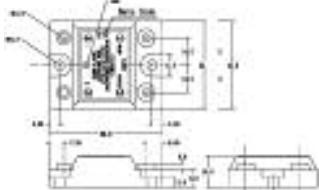
V<sub>s</sub> 4→32Vdc  
I<sub>s</sub> 12→5mA  
V<sub>out</sub> 250Vrms (AC Only)  
I<sub>out</sub> 40Arms  
V<sub>iso</sub> 4000Vac  
R<sub>iso</sub> 10GΩ  
Code KSD240AC8



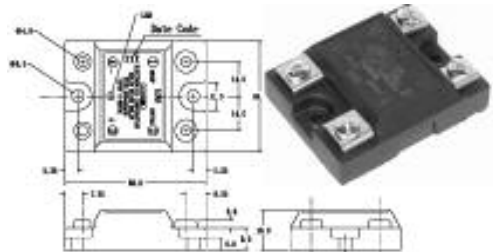
[www.wescomponents.com/DataSheets/KSD240AC8.pdf](http://www.wescomponents.com/DataSheets/KSD240AC8.pdf)

### SOLID STATE RELAY 40A 480VAC

V<sub>s</sub> 4→32Vdc  
I<sub>s</sub> 12→5mA  
V<sub>out</sub> 480Vrms (AC Only)  
I<sub>out</sub> 40Arms  
V<sub>iso</sub> 4000Vac  
R<sub>iso</sub> 10GΩ  
Code KSD440AC8



[www.wescomponents.com/DataSheets/KSD440AC8.pdf](http://www.wescomponents.com/DataSheets/KSD440AC8.pdf)



## VALVES ENTERING THE NEW MELLENNIUM

have been a source of general replacement valves for the repairman for decades. Some old and popular tubes have remained in stock for radio restorers, hobbyists, etc. Check for substitutions as our range covers most general purpose tubes. eq\* (equivalent) are suggestions only.



### NEW VALVES WITH NEW TECHNOLOGY

Glasnost has re-invigorated the valve industry! A new range of tubes have arrived from Russia and claim to rival Mullards and better the classics of old! New materials and technology make these new valves the best in the world! Ever! Tube technology enters the new millennium.

SOVTEK & ELECTRO-HARMONIX, labels may change depending on stock, are our new range of tubes and will suit both audiophile and musician applications for use in HiFi and Guitar Amps, etc. The valve types and models we have chosen to stock offer both reliability and sonic purity in the one tube. Some of the popular valves are available in different series (see suffix), this is also to offer our discerning eared customers a choice in tone.

See [www.wescomponents.com/valves](http://www.wescomponents.com/valves) for more information and substitutions.

### 6550-WE MATCHED PAIR

Output paired valves with new improved design to be the finest ever produced! Improvements to power out, heat dissipation, linearity, transconductance, reliability, greater headroom, etc, etc.. This valve has been engineered for the discerning audiophile or musician. Receiving rave reviews for its superior tone and sonics. Sold only in matched pairs. The "Platinum" matching service is done in factory and consists of 24Hr tube burn in! Exceptional. Made in Russia. Metal ringed base.  
Code 6550WE  
pair.



### KT88

This tube was designed to offer the highest output power, the most robust, reliable, dependability, with the best linear performance available in a KT88! A unique tri-alloy plate structure in the Sovtek valve yields a better minimum plate current and higher transconductance, while improving heat dissipation yet reducing tube warm-up time. The *Triple Carbonate Oxide Cathode* allows the Sovtek KT88 to operate at full power for extended time periods without failure or tonal compression. These improved characteristics offer increased output power, higher amplification factors, and more precise tube matching with minimal drift while maintaining an impressive tonal clarity. The Sovtek KT88 offers the tonal quality to suit home HiFi for the discerning audiophile and the on-road reliability for the musician!  
Code KT88



### 12AX7-EH (ECC83)

High gain, ultra low noise, detailed music tone rivals NOS types. Spiral filament eliminates cathode hum. Smaller plate and hotter output. "Mullard" copy. Suit Guitar, etc.  
Code 12AX7EH



### 12AX7-LPS (ECC83)

Special Low Noise Edition with spiral filament for No hum. "...very linear, large full sound stage, very musically detailed...". Classic large plate design, like the old Mullards. Suit HiFi applications.  
Code 12AX7LPS



### 6L6-EH (30W)

"RCA Blackplate" type. Robust. Improved grid and plate for higher power, etc. Mica spacers & springs for no more rattle microphonics. Probably the best 6L6 ever made!  
eq.\* 5881 6BG6 6L6GC/GT  
Code 6L6EH



### 6L6-WXT (30W)

Very similar to the EH with the same high spec improvements. No rattle microphonics, etc. Suit Audiophile or guitarists. Stocked for its choice tone.  
eq.\* 5881 6BG6 6L6GC/GT  
Code 6L6WXT



### 6CA7 / EL34 (25W)

"Very close sonics to a Mullard" Extremely musical with sound that is rich, smooth, highly detailed without being edgy. Sweet mids, deep bass, extended highs. Overall, a well balanced valve.  
Code EL34EH



### 6CA7 / EL34 (25W) - BIG BOTTLE

Designed to exacting specifications of a Philips 6CA7, this classic tetrode retains a high detail tone with military reliability as a direct EL34 replacement with higher headroom, etc.  
Code 6CA7EH



**12AT7 ECC81 - DUAL TRIODE V AMP**

Vh Ih Va Pa  
 12.6 .15 300 2.5  
 Low noise dual triode.  
 As used in Fender Amps.  
 eq.\* CV10662/455  
 CV8154/9859  
 Code 12AT7



**BASE "B9A" "NOVEL" - PCB MOUNT**

9 pin valve socket  
 with ceramic base  
 to PCB solder pins.  
 Code VS901



**12AU7A 5814A - DOUBLE TRIODE AF**

Vh Ih Va Pa  
 12.6 .15 300 2.75  
 GP AF Low gain. eg, driver tube.  
 eq.\* 12AU7, 5814, 5963, 6067,  
 6189, 6680, 7489, 7730, B529,  
 CV10323/10666/3900, ECC82/83, more.  
 Code 12AU7A



**BASE "B9A" "NOVEL" - CHASSIS + SHIELD\***

9 pin valve socket with  
 ceramic base to solder TAGs.  
 Includes optional shield  
 cap that fits only the  
 smaller 40 to 50mm tubes.  
 12AU7, 12AT7, 12AX7, etc.  
 Code VS912



**6V6GT/EH - TETRODE 5W**

Vh Ih Va Pa  
 6.3 .45 285 5.5  
 Single or Push Pull (15W)  
 Audio Output Tube EH  
 eq.\* 8571, 6AY5, 6P6C,  
 7184, CV509/510/511.  
 Code 6V6GT



**BASE "OCTAL" - PCB MOUNT**

8 pin valve socket  
 with ceramic base  
 to PCB solder pins.  
 KT88, 6550, 6L6,  
 and others...  
 standard Octal.  
 Code VS801



**6SN7GT ECC32 - TWIN TRIODE AF**

Vh Ih Va Ia  
 6.3 .6 250 .009  
 Premium Q AF GP Valve  
 eg. suit driver for 6L6.  
 eq.\* CV181,1986,1988,278,  
 ECC32, E1606, VT231, 12SN7.  
 Code 6SN7GT



**BASE "OCTAL" - CHASSIS MOUNT**

8 pin. Ceramic base  
 to solder TAGs.  
**PREMIUM 40x56mm**  
 2 piece contacts.  
 VS812



**6BQ5 EL84 - O/P PENTODE AF 10W**

Vh Ih Va Pa  
 6.3 .75 250 2.2  
 10W HiFi AF amp  
 VOX AC30 (Beetles).  
 \* 6P15, CV10321, CV2975,  
 7189, 7320, EL84, 6GK6.,  
 Code 6BQ5



**VALVE LIST OF CURRENT & LTD-OBSOLETE STOCK**

| Code     | Base | Substitutions                        |
|----------|------|--------------------------------------|
| 5AR4     | B9A* | 54KU GZ30/33/34/37 R52 U54 U77 +     |
| 6AL3     | B9A  | EY88 10745                           |
| 6AU4     | Oct  | 6GK17                                |
| 6BL8     | B9A* | 6C16 ECF80 E80CF                     |
| 6BM8     | B9A  | ECL82 6PL12                          |
| 6BQ5     | B9A  | 6GB6 6P15 EL84 E84L N709             |
| 6BQ7     | B9A* | ECC180                               |
| 6BY7     | B9A  | 6F19 6F26 EF85 W719                  |
| 6BX6     | B9A  | 8D6 64SPT EF80 Z152 Z719             |
| 6CA7     | Oct  | KT77 EL34 12E13 7D11 (See Also KT88) |
| 6CW5     | B9A  | EL86                                 |
| 6DX8     | B9A  | ECL84                                |
| 6EH7     | B9A  | EF183 EF811 6F25 6F29                |
| 6ES8     | B9A  | 6922-JAN Philips, 6DJ8 ECC88 ECC189  |
| 6GK5     | B7G  | TV Triode                            |
| 6GW8     | B9A  | ECL86 Triode Plus Output Pentode     |
| 6JW8     | B9A* | ECF802 PCF802                        |
| 6U9      | B9A* | ECF201                               |
| 6L6EH    | Oct  | KT66 EL37 5881 6BG6                  |
| 6L6WXT   | Oct  | KT66 EL37 5881 6BG6                  |
| 12AU7A   | B9A* | ECC82/186/802/S B329/749 E82CC +     |
| 12AT6    | B7G  | 12BC32 HBC90 HBC91                   |
| 12AT7    | B9A* | ECC81/801/S E81CC B152/309/739 +     |
| 12AX7LPS | B9A* | 6L13 B339 B759 ECC83 ECC803 +        |
| 12AX7EH  | B9A* | 6L13 B339 B759 ECC83 ECC803 +        |
| PL500    | B9D  | 27GB5/T CV10725 (EL500 Vh=6)         |
| PL504    | B9D  | CV10955 (EL504 Vh=6)                 |
| PL508    | B9D  | 17KW6 (EL508 Vh=6)                   |
| PY500A   | B9D  | (EY500 6EC4A Vh=?)                   |

**5AR4 GZ34 - RECTIFIER GP**

Vh Ih Va Idc  
 5 2 X .16  
 X= 550-0-550 max  
 Popular power supply  
 rectifier Suit most  
 power amp applications.  
 Code 5AR4



**VALVE SUPPLY**

Due to the limited  
 production of valves,  
 some supply variations may  
 occur beyond our control.  
 Specifications will be matched,  
 however brands supplied may vary.  
 Sorry, specific branded valves  
 on request is not possible.



Substitutions for suggestion only! Check Valve Specs'  
 Visit [www.wescomponents.com/valves](http://www.wescomponents.com/valves)  
 \* = Compatible with VS912 socket