



Hi-Rel Components from Aeroflex / Metelics

Diodes

Switching

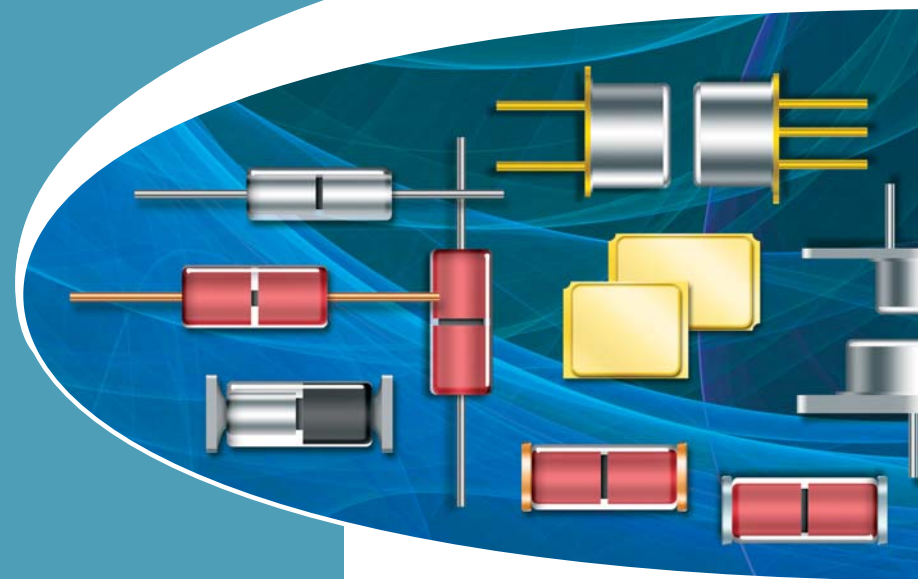
Zener

TC Zener

Schottky

JAN/JANS Certified

DSCC Certified

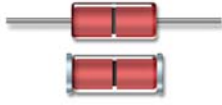


Short Form Catalog

March 2010

Zener Diodes

Available in JAN, JANTX and JANTXV levels to MIL-PRF-19500 slash sheets /117, /127, /435, and /437 in both axial leaded and MELF packages. Other features include metallurgically bonded, hermetically sealed, double plug construction and designs with low noise characteristics. All models are also available in MELF packaging.

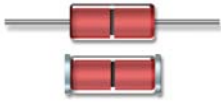


ZENER DIODES
1N4099-1 to 1N4135-1,
1N4614-1 to 1N4627-1

TYPES (Note 1)	Nominal Zener Voltage, V_Z	Zener Test Current, I_{ZT}	Maximum Zener Impedance, Z_{ZT}	Maximum Reverse Current, $I_R @ V_R$	Maximum Noise Density, $N_b @ I_{ZT}$	Maximum Zener DC Current, I_{ZM}	
	Volts	μA	Ohms	μA	Volts	$\mu V / \sqrt{Hz}$	mA
1N4614	1.8	250	1200	7.5	1	1	120
1N4615	2.0	250	1250	5.0	1	1	110
1N4616	2.2	250	1300	4.0	1	1	100
1N4617	2.4	250	1400	2.0	1	1	95
1N4618	2.7	250	1500	1.0	1	1	90
1N4619	3.0	250	1600	0.8	1	1	87
1N4620	3.3	250	1650	7.5	1.5	1	85
1N4621	3.6	250	1700	7.5	2	1	83
1N4622	3.9	250	1650	5.0	2	1	80
1N4623	4.3	250	1600	4.0	2	1	77
1N4624	4.7	250	1550	10.0	2	1	75
1N4625	5.1	250	1500	10.0	3	2	70
1N4626	5.6	250	1400	10.0	4	4	65
1N4627	6.2	250	1200	10.0	5	5	61
1N4099	6.8	250	200	10.0	5.17	40	56
1N4100	7.5	250	200	10.0	5.70	40	51
1N4101	8.2	250	200	1.0	6.24	40	46
1N4102	8.7	250	200	1.0	6.61	40	44
1N4103	9.1	250	200	1.0	6.92	40	42
1N4104	10	250	200	1.0	7.60	40	38
1N4105	11	250	200	0.05	8.44	40	35
1N4106	12	250	200	0.05	8.12	40	32
1N4107	13	250	200	0.05	9.857	40	29
1N4108	14	250	200	0.05	10.65	40	27
1N4109	15	250	100	0.05	11.40	40	25
1N4110	16	250	100	0.05	12.15	40	24
1N4111	17	250	100	0.05	12.92	40	22
1N4112	18	250	100	0.05	13.67	40	21
1N4113	19	250	150	0.05	14.44	40	20
1N4114	20	250	150	0.01	15.20	40	19
1N4115	22	250	150	0.01	16.72	40	17
1N4116	24	250	150	0.01	18.25	40	16
1N4117	25	250	150	0.01	19.00	40	15
1N4118	27	250	150	0.01	20.45	40	14
1N4119	29	250	200	0.01	21.28	40	14
1N4120	30	250	200	0.01	22.80	40	13
1N4121	33	250	200	0.01	25.08	40	12
1N4122	36	250	200	0.01	27.38	40	11
1N4123	39	250	200	0.01	29.65	40	9.8
1N4124	43	250	250	0.01	32.65	40	8.9
1N4125	47	250	250	0.01	35.75	40	8.1
1N4126	51	250	300	0.01	38.76	40	7.5
1N4127	56	250	300	0.01	42.60	40	6.7
1N4128	60	250	400	0.01	45.60	40	6.4
1N4129	62	250	500	0.01	47.10	40	6.1
1N4130	68	250	700	0.01	51.68	40	5.6
1N4131	75	250	700	0.01	57.00	40	5.1
1N4132	82	250	800	0.01	62.32	40	4.6
1N4133	87	250	1000	0.01	66.12	40	4.4
1N4134	91	250	1200	0.01	69.16	40	4.2
1N4135	100	250	1500	0.01	76.00	40	3.0

Electrical specifications @ $T_A = +25^\circ C$ (unless otherwise specified)

NOTE 1: The JEDEC type numbers shown (B Suffix) have a $\pm 5\%$ tolerance on nominal Zener Voltage. The suffix A is used to identify $\pm 10\%$ tolerance; suffix C is used to identify $\pm 2\%$; and suffix D is used identify $\pm 1\%$; no suffix indicates $\pm 20\%$.

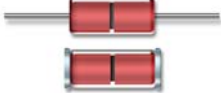


LOW NOISE ZENER DIODES
1N5518B-1 to 1N5546B-1

TYPES (Note 1)	Volts	μA	Ohms	μA dc	NON & A- Suffix	B-, C-, D- Suffix	mA dc	μV / √ Hz	B-, C-, D- Suffix	
									Volts	mA dc
1N5518B	3.3	20	26	5.0	0.90	1.0	115	0.5	0.90	2.0
1N5519B	3.6	20	24	3.0	0.90	1.0	105	0.5	0.90	2.0
1N5520B	3.9	20	22	1.0	0.90	1.0	98	0.5	0.85	2.0
1N5521B	4.3	20	18	3.0	1.0	1.5	88	0.5	0.75	2.0
1N5522B	4.7	10	22	2.0	1.5	2.0	81	0.5	0.60	1.0
1N5523B	5.1	5.0	26	2.0	2.0	2.5	75	0.5	0.65	0.25
1N5524B	5.6	3.0	30	2.0	3.0	3.5	68	1.0	0.30	0.25
1N5525B	6.2	1.0	30	1.0	4.5	5.0	61	1.0	0.20	0.01
1N5526B	6.8	1.0	30	1.0	5.5	6.2	56	1.0	0.10	0.01
1N5527B	7.5	1.0	35	0.5	6.0	6.8	51	2.0	0.05	0.01
1N5528B	8.2	1.0	40	0.5	6.5	7.5	46	4.0	0.05	0.01
1N5529B	9.1	1.0	45	0.1	7.0	8.2	42	4.0	0.05	0.01
1N5530B	10.0	1.0	60	0.05	8.0	9.1	38	4.0	0.10	0.01
1N5531B	11.0	1.0	80	0.05	9.0	9.9	35	5.0	0.20	0.01
1N5532B	12.0	1.0	90	0.05	9.5	0.8	32	10	0.20	0.01
1N5533B	13.0	1.0	90	0.01	10.5	11.7	29	15	0.20	0.01
1N5534B	14.0	1.0	100	0.01	11.5	12.6	27	20	0.20	0.01
1N5535B	15.0	1.0	100	0.01	12.5	13.5	25	20	0.20	0.01
1N5536B	16.0	1.0	100	0.01	13.0	14.4	24	20	0.20	0.01
1N5537B	17.0	1.0	100	0.01	14.0	15.3	22	20	0.20	0.01
1N5538B	18.0	1.0	100	0.01	15.0	16.2	21	20	0.20	0.01
1N5539B	19.0	1.0	100	0.01	16.0	17.1	20	20	0.20	0.01
1N5540B	20.0	1.0	100	0.01	17.0	18.0	19	20	0.20	0.01
1N5541B	22.0	1.0	100	0.01	18.0	19.8	17	20	0.25	0.01
1N5542B	24.0	1.0	100	0.01	20.0	21.6	16	20	0.30	0.01
1N5543B	25.0	1.0	100	0.01	21.0	22.4	15	20	0.35	0.01
1N5544B	28.0	1.0	100	0.01	23.0	25.2	14	20	0.40	0.01
1N5545B	30.0	1.0	100	0.01	24.0	27.0	13	20	0.45	0.01
1N5546B	33.0	1.0	100	0.01	28.0	29.7	12	20	0.50	0.01

Electrical specifications @ T_A = +25°C (unless otherwise specified)

NOTE 1: No Suffix type numbers are ±20% with guaranteed limits for only V_Z, I_R, and V_F. Units with "A" suffix are ±10% with guaranteed limits for V_Z, I_R, and V_F. Units with guaranteed limits for all six parameters are indicated by a "B" suffix for ±5.0% units, "C" suffix for ±2.0% and "D" suffix for ±1.0%.



ZENER DIODES
1N746A-1N759,
1N4370A-1N4372A

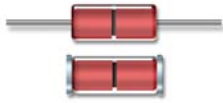
TYPES (Note 1)	Volts	mA	Ohms (Ω)	μA	Volts	Volts
1N4370A, CDLL4370A	2.4	20	30	100	1.0	155
1N4371A, CDLL4371A	2.7	20	30	60	1.0	140
1N4372A, CDLL4372A	3.0	20	29	30	1.0	125
1N746A, CDLL746A	3.3	20	28	5	1.0	120
1N747A, CDLL747A	3.6	20	24	3	1.0	110
1N748A, CDLL748A	3.9	20	23	2	1.0	100
1N749A, CDLL749A	4.3	20	22	2	1.0	90
1N750A, CDLL750A	4.7	20	19	5	1.5	85
1N751A, CDLL751A	5.1	20	17	5	2.0	75
1N752A, CDLL752A	5.6	20	11	5	2.5	70
1N753A, CDLL753A	6.2	20	7	5	3.5	65
1N754A, CDLL754A	6.8	20	5	2	4.0	60
1N755A, CDLL755A	7.5	20	6	2	5.0	55
1N756A, CDLL756A	8.2	20	8	1	6.0	50
1N757A, CDLL757A	9.1	20	10	1	7.0	45
1N758A, CDLL758A	10.0	20	17	1	8.0	40
1N759A, CDLL759A	12.0	20	30	1	9.0	35

Electrical specifications @ T_A = +25°C (unless otherwise specified)

NOTE 1: Zener voltage tolerance on "A" suffix is ±5%. No Suffix denotes ±10% tolerance, "C" suffix denotes ±2% tolerance and "D" suffix denotes ±1% tolerance.

NOTE 2: Zener voltage is measured with the device junction in thermal equilibrium at an ambient temperature of 25°C ± 3°C.

NOTE 3: Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT}.



ZENER DIODES
1N957B - 1N992B

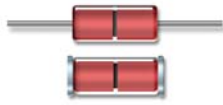
TYPES (Note 1)	Nominal Zener Voltage, V_Z	Zener Test Current, I_ZT	Maximum Zener Impedance $Z_{ZT} @ I_ZT$			Maximum Zener DC Current, I_{ZM}	Maximum Surge Leakage, I_{ZSM}	Maximum Reverse Current, $I_R @ V_R$	Maximum Temperature Coefficient, α_VZ	
	Volts	mA	Ohms	Ohms	mA	mA	μA	Volts	% / °C	
1N957B	6.8	18.5	4.5	700	1.0	55	300	150	5.2	+0.05
1N958B	7.5	16.5	5.5	700	.5	50	275	75	5.7	+0.058
1N959B	8.2	15.0	6.5	700	.5	45	250	50	6.2	+0.065
1N960B	9.1	14.0	7.5	700	.5	41	225	25	6.9	+0.068
1N961B	10	12.5	8.5	700	.25	38	200	10	7.6	+0.075
1N962B	11	11.5	9.5	700	.25	32	175	5	8.4	+0.076
1N963B	12	10.5	11.5	700	.25	31	160	5	9.1	+0.077
1N964B	13	9.5	13	700	.25	28	150	5	9.9	+0.079
1N965B	15	8.5	16	700	.25	25	130	5	11.4	+0.082
1N966B	16	7.8	17	700	.25	24	120	5	12.2	+0.083
1N967B	18	7.0	21	750	.25	20	110	5	13.7	+0.085
1N968B	20	6.2	25	750	.25	18	100	5	15.2	+0.086
1N969B	22	5.6	29	750	.25	16	90	5	16.7	+0.087
1N970B	24	5.2	33	750	.25	15	80	5	18.2	+0.088
1N971B	27	4.6	41	750	.25	13	70	5	20.6	+0.090
1N972B	30	4.2	49	1000	.25	12	65	5	22.8	+0.091
1N973B	33	3.8	58	1000	.25	11	60	5	25.1	+0.092
1N974B	36	3.4	70	1000	.25	10	55	5	27.4	+0.093
1N975B	39	3.2	80	1000	.25	9.5	46	5	29.7	+0.094
1N976B	43	3.0	93	1000	.25	8.8	44	5	32.7	+0.095
1N977B	47	2.7	105	1500	.25	7.9	40	5	35.8	+0.095
1N978B	51	2.5	125	1500	.25	7.4	37	5	38.8	+0.096
1N979B	56	2.2	150	2000	.25	6.8	35	5	42.6	+0.096
1N980B	62	2.0	185	2000	.25	6.0	30	5	47.1	+0.097
1N981B	68	1.8	230	2000	.25	5.5	28	5	51.7	+0.097
1N982B	75	1.7	270	2000	.25	5.0	26	5	56.0	+0.098
1N983B	82	1.5	330	3000	.25	4.6	23	5	62.2	+0.098
1N984B	91	1.4	400	3000	.25	4.1	21	5	69.2	+0.099
1N985B	100	1.3	500	3000	.25	3.7	18	5	76.0	+0.11
1N986B	110	1.1	750	4000	.25	3.3	16	5	83.6	+0.11
1N987B	120	1.0	900	4500	.25	3.1	15	5	91.2	+0.11
1N988B	130	0.95	1100	5000	.25	2.7	13	5	98.8	+0.11
1N989B	150	0.85	1500	6000	.25	2.4	12	5	114.0	+0.11
1N990B	160	0.80	1700	6500	.25	2.2	11	5	121.6	+0.11
1N991B	180	0.68	2200	7100	.25	2.0	10	5	136.8	+0.11
1N992B	200	0.65	2500	8000	.25	1.8	9	5	152.0	+0.11

Electrical specifications @ $T_A = +25^\circ C$ (unless otherwise specified)

NOTE 1: The JEDEC type numbers shown (B Suffix) have a $\pm 5\%$ tolerance on nominal Zener Voltage. The suffix A is used to identify $\pm 10\%$ tolerance; suffix C is used to identify $\pm 2\%$; and suffix D is used identify $\pm 1\%$; no suffix indicates $\pm 20\%$.

Temperature Compensated (TC) Zener Reference Diodes

Available in JAN, JANTX, JANTXV and JANS levels to MIL-PRF-19500 slash sheets /159 and /452 in both axial leaded and MELF packages. Other features include metallurgically bonded and double plug construction.



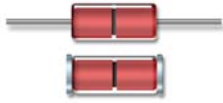
TC ZENER DIODES
1N4565-1N4584, -1

TYPES (Note 1)	Zener Test Current I_{ZT} mA	Effective Temperature Coefficient %/ °C	Voltage Temperature Stability ($\frac{dV_Z}{dT}$ maximum) (Note 1) mV/°C	Temperature Range °C	Maximum Dynamic Zener Impedance (Note 2) OHM (Ω)
1N4565, 1N4565UR 1N4565A, 1N4565AUR	0.5 0.5	0.01 0.01	48 100	0 to +75°C -55 to +100°C	200 200
1N4566, 1N4566UR 1N4566A, 1N4566AUR	0.5 0.5	0.005 0.005	24 50	0 to +75°C -55 to +100°C	200 200
1N4567, 1N4567UR 1N4567A, 1N4567AUR	0.5 0.5	0.002 0.002	10 20	0 to +75°C -55 to +100°C	200 200
1N4568, 1N4568UR 1N4568A, 1N4568AUR	0.5 0.5	0.001 0.001	5 10	0 to +75°C -55 to +100°C	200 200
1N4569, 1N4569UR 1N4569A, 1N4569AUR	0.5 0.5	0.0005 0.0005	2.5 5	0 to +75°C -55 to +100°C	200 200
1N4570, 1N4570UR 1N4570A, 1N4570AUR	1.0 1.0	0.01 0.01	48 100	0 to +75°C -55 to +100°C	100 100
1N4571, 1N4571UR 1N4571A, 1N4571AUR	1.0 1.0	0.005 0.005	24 50	0 to +75°C -55 to +100°C	100 100
1N4572, 1N4572UR 1N4572A, 1N4572AUR	1.0 1.0	0.002 0.002	10 20	0 to +75°C -55 to +100°C	100 100
1N4573, 1N4573UR 1N4573A, 1N4573AUR	1.0 1.0	0.001 0.001	5 10	0 to +75°C -55 to +100°C	100 100
1N4574, 1N4574UR 1N4574A, 1N4574AUR	1.0 1.0	0.0005 0.0005	2.5 5	0 to +75°C -55 to +100°C	100 100
1N4575, 1N4575UR 1N4575A, 1N4575AUR	2.0 2.0	0.01 0.01	48 100	0 to +75°C -55 to +100°C	50 50
1N4576, 1N4576UR 1N4576A, 1N4576AUR	2.0 2.0	0.005 0.005	24 50	0 to +75°C -55 to +100°C	50 50
1N4577, 1N4577UR 1N4577A, 1N4577AUR	2.0 2.0	0.002 0.002	10 20	0 to +75°C -55 to +100°C	50 50
1N4578, 1N4578UR 1N4578A, 1N4578AUR	2.0 2.0	0.001 0.001	5 10	0 to +75°C -55 to +100°C	50 50
1N4579, 1N4579UR 1N4579A, 1N4579AUR	2.0 2.0	0.0005 0.0005	2.5 5	0 to +75°C -55 to +100°C	50 50
1N4580, 1N4580UR 1N4580A, 1N4580AUR	4.0 4.0	0.01 0.01	48 100	0 to +75°C -55 to +100°C	25 25
1N4581, 1N4581UR 1N4581A, 1N4581AUR	4.0 4.0	0.005 0.005	24 50	0 to +75°C -55 to +100°C	25 25
1N4582, 1N4582UR 1N4582A, 1N4582AUR	4.0 4.0	0.002 0.002	10 20	0 to +75°C -55 to +100°C	25 25
1N4583, 1N4583UR 1N4583A, 1N4583AUR	4.0 4.0	0.001 0.001	5 10	0 to +75°C -55 to +100°C	25 25
1N4584, 1N4584UR 1N4584A, 1N4584AUR	4.0 4.0	0.0005 0.0005	2.5 5	0 to +75°C -55 to +100°C	25 25

Electrical specifications @ +25°C (unless otherwise specified)

NOTE 1: The maximum allowable change observed over the entire temperature range i.e., the diode voltage will not exceed the specified mV at any discrete temperature between the established limits, per JEDEC standard No. 5.

NOTE 2: Zener impedance is derived by superimposing on I_{ZT} A 60Hz rms a.c. current equal to 10% of I_{ZT} .



TC ZENER DIODES
1N821 to 1N828, -1
1N821UR-1N828UR, -1

Nominal Zener Voltage
 $V_Z @ I_{ZT}$

Zener Test Current
 I_{ZT}

Maximum Zener Impedance
 Z_{ZT} (Note 1)

Maximum Reverse Current, $I_R @ V_R$

Maximum Zener Current, I_{ZM}

TYPES (Note 1)	Volts	% / °C	Ohms (Ω)	mA	% / °C
1N821, 1N821UR	5.9–6.5	7.5	15	96	0.01
1N821A, 1N821AUR	5.9–6.5	7.5	10	96	0.01
1N822, 1N822UR †	5.9–6.5	7.5	15	96	0.01
1N823, 1N823UR	5.9–6.5	7.5	15	48	0.005
1N823A, 1N823AUR	5.9–6.5	7.5	10	48	0.005
1N824, 1N824UR †	5.9–6.5	7.5	15	48	0.005
1N825, 1N825	5.9–6.5	7.5	15	19	0.002
1N825A, 1N825AUR	5.9–6.5	7.5	10	19	0.002
1N826, 1N826UR	6.2–6.9	7.5	15	20	0.002
1N827, 1N827UR	5.9–6.5	7.5	15	9	0.001
1N827A, 1N827AUR	5.9–6.5	7.5	10	9	0.001
1N828, 1N828UR	6.2–6.9	7.5	15	10	0.001
1N829, 1N829UR	5.9–6.5	7.5	15	5	0.0005
1N829A, 1N829AUR	5.9–6.5	7.5	10	5	0.0005

Electrical specifications @ +25°C (unless otherwise specified)

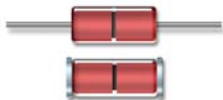
† Double Anode: Electrical Specifications Apply Under Both Bias Polarities.

NOTE 1: Zener impedance is derived by superimposing on I_{ZT} A 60 Hz rms a.c. current equal to 10% of I_{ZT} .

NOTE 2: The maximum allowable change observed over the entire temperature range i.e., the diode voltage will not exceed the specified mV at any discrete temperature between the established limits, per JEDEC standard No. 5.

Silicon Switching Diodes

Available in JAN, JANTX, JANTXV levels to MIL-PRF-19500 slash sheets /116, /144, /231, JAN and JANS /578 & /609 in both axial leaded and MELF packages. Other features include Metallurgically Bonded; Hermetically Sealed and Double Plug Construction.



SWITCHING DIODES
1N3600, 1N4151, -1

$V_{BR} I_R = 10 \mu A$

V_{RWM}

$I_{R1} V_R = 50 V_{dc}$
 $T_A = 25^\circ C$

$I_{R2} V_R = 50 V_{dc}$
 $T_A = 150^\circ C$

$C I_R = 0; f = 1 MHz$
AC signal =
50 mV (p-p)

$t_{rr} I_R = 10 - 100 mA$
 $I_F = 10 - 100 mA$
 $R_L = 100 \Omega$

$V_{I1} I_F = 1 mA dc$

$V_{I2} I_F = 10 mA dc$

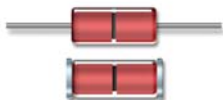
$V_{I3} I_F = 50 mA dc$
(pulsed)

$V_{I4} I_F = 100 mA dc$
(pulsed)

$V_{I5} I_F = 200 mA dc$
(pulsed)

TYPES	Volts	V(pk)	μA dc	μA dc	pF	nA	V dc min	V dc max	V dc min	V dc max	V dc min	V dc max	V dc min	V dc max	V dc min	V dc max
1N3600, 1N3600U	75	50	0.1	100	2.5	4.0	0.54	0.62	0.66	0.74	0.76	0.86	0.82	0.92	0.87	1.00
1N4151, 1N4151-1 1N4151U, 1N4151U-1	75	50	0.1	100	2.5	4.0	0.54	0.62	0.66	0.74	0.76	0.86	0.82	0.92	0.87	1.00

Electrical specifications @ +25°C (unless otherwise specified)



SWITCHING DIODES
1N914U & 1N4148U-1

$V_{BR} @ 100 \mu A$

V_{RWM}

I_R

$V_{I1} I_F = 10 mA$

$V_{I2} I_F = 50 mA$

$t_{rr} I_R = 10 mA$
 $I_F = 10 mA$
 $R_L = 100 \Omega$

$I_{R1} @ 20 V_{dc}$

$I_{R2} @ 75 V_{dc}$

$I_{R3} V_R = 20 V$
 $T_A = 150^\circ C$

$I_{R3} V_R = 20 V$
 $T_A = 150^\circ C$

Capacitance @ 0 V

Capacitance @ 1.5 V

TYPES	Volts	V(pk)	mA	V dc	V dc	nsec	nA	μA	μA	μA	pF	pF
1N914, 1N914U	100	75	75	0.8	1.2	5	25	0.5	35	75	4.0	2.8
1N4148-1, 1N4148U-1	100	75	200	0.8	1.2	5	35	0.5	35	75	4.0	2.8

Electrical specifications @ +25°C (unless otherwise specified)



SWITCHING DIODES
1N6638 SERIES

TYPES	$V_{BR} @ I_R$		V_{WRM}	$V_{FR} / t_{tr} @ I_F = 200 \text{ mA}$		$C_{T1} V_R = 0.0V$		$C_{T2} V_R = 1.5V$		$t_{tr} I_R = 10 \text{ mA}$ $I_F = 10 \text{ mA}$		$V_{R1} V_R = V_{RWM}$		$I_{R2} V_R = 20V$ $T_A = 150^\circ C$		$I_{R3} V_R = 20V$ $T_A = 150^\circ C$		$I_{R4} V_R = V_{RWM}$		$V_F @ I_F$		$V_{F2} @ I_F$ $T_A = -55^\circ C$	I_F
	V(pk)	μA		V(pk)	$V_{FR} / V(pk)$	$t_{tr} \text{ ns}$	pF	pF	ns	nA dc	nA dc	μA dc	μA dc	V dc min	V dc max	V dc max	mA pulsed						
1N6638	150	100	125	5.0	20	2.5	2.0	4.5	35	500	50	100	-	1.1	1.2	200							
1N6639	100	10	75	5.0	10	2.5	-	4.0	-	100	-	90	-	1.2	1.3	500							
1N6640	75	10	50	5.0	10	2.5	-	4.0	-	100	-	90	0.54	0.62	1								
													0.76	0.86	50								
													0.82	0.92	100								
													0.87	1.0	200								
1N6641	75	10	50	5.0	10	3.0	-	5.0	-	100	-	90	-	1.1	1.2	200							
1N6642	100	100	75	5.0	20	5.0	2.8	5.0	25	500	50	100	-	1.0	-	10							
													-	1.2	1.2	100							
1N6643	75	100	50	5.0	20	5.0	2.8	6.0	50	500	75	100	-	1.0	-	10							
													-	1.2	1.4	100							

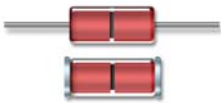
Electrical specifications @ $T_A = +25^\circ C$ (unless otherwise specified)



SWITCHING DIODES
1N6638U SERIES

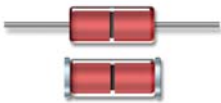
TYPES	$V_{BR} @ I_R$		V_{WRM}	$V_{FR} / t_{tr} @ I_F = 200 \text{ mA}$		$C_{T1} V_R = 0.0V$		$C_{T2} V_R = 1.5V$		$t_{tr} I_R = 10 \text{ mA}$ $I_F = 10 \text{ mA}$		$I_{R1} V_R = V_{RWM}$		$I_{R2} V_R = 20V$ $T_A = 150^\circ C$		$I_{R3} V_R = 20V$ $T_A = 150^\circ C$		$I_{R4} V_R = V_{RWM}$		$V_F @ I_F$		$V_{F2} @ I_F$ $T_A = -55^\circ C$	I_F
	V(pk)	μA		V(pk)	$V_{FR} / V(pk)$	$t_{tr} \text{ ns}$	pF	pF	ns	nA dc	nA dc	μA dc	μA dc	V dc min	V dc max	V dc max	mA pulsed						
1N6638U & US	150	100	125	5.0	20	2.5	2.0	4.5	35	500	50	100	-	1.1	1.2	200							
1N6639U & US	100	10	75	5.0	10	2.5	-	4.0	-	100	-	90	-	1.2	1.3	500							
1N6640U & US	75	10	50	5.0	10	2.5	-	4.0	-	100	-	90	0.54	0.62	1								
													0.76	0.86	50								
													0.82	0.92	100								
													0.87	1.0	200								
1N6641U & US	75	10	50	5.0	10	3.0	-	5.0	-	100	-	90	-	1.1	1.2	200							
1N6642U & US	100	100	75	5.0	20	5.0	2.8	5.0	25	500	50	100	-	1.0	-	10							
													-	1.2	1.2	100							
1N6643U & US	75	100	50	5.0	20	5.0	2.8	6.0	50	500	75	100	-	1.0	-	10							
													-	1.2	1.4	100							

Electrical specifications @ $T_A = +25^\circ C$ (unless otherwise specified)



SWITCHING DIODES
1N4531

TYPES	V_F			I_R			V_{BR}			$t_{tr} I_R = 10 \text{ mA}$ $I_F = 10 \text{ mA}$ $I_{rec} = 100 \Omega$		$TFR @ I_F = 50 \text{ mA}$		$V_{FR} @ I_F = 50 \text{ mA}$		Capacitance @ 0 V		Capacitance @ 1.5 V	
	Ambient ($^\circ C$)	I_F mA	V dc max	Ambient ($^\circ C$)	V dc	A max	Ambient ($^\circ C$)	I_R μA	V dc max	V dc max	nsec	nsec	V(pk)	pF	pF				
1N4531, 1N4531UR	25	10	0.8	25	20	0.025	25	100	100	25	5	20	5	4	2.8				
	25	100	1.2	25	75	0.500													
	150	10	0.8	150	20	35.0													
	-55	100	1.3	150	75	75.0													



SWITCHING DIODES
1N4454 & 1N4454-1

TYPES	$V_{BR} @ 5 \mu A$		V_{WRM}	I_O	$V_{F1} I_F = 10 \text{ mA}$		$V_{F2} I_F = 10 \text{ mA}$		t_{tr}	$I_{R1} @ 50 \text{ Vdc}$		$I_{R2} @ 75 \text{ Vdc}$ $T_A = 150^\circ C$		Capacitance @ 0 V	
	Volts	V(pk)			V dc	V dc	nsec	μA		μA	pF				
1N4454, 1N4454-1 1N4454UR, 1N4454UR-1	75	50	200	0.8	0.7	4	0.1	100	2.0						

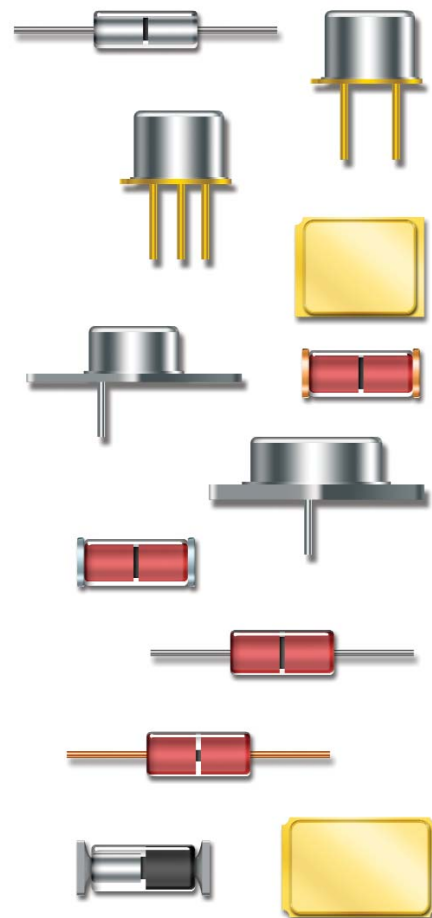
In February 2009, Aeroflex acquired Hi-Rel Components to bring you JAN-certified discrete products!

Product Portfolio:

- Current offerings include Switching, TC Zeners, and Zener Diodes
- Qualifications coming for Current Regulators, Schottkys, Transistors, SCRs
- Class H and K Element Evaluation
- Test Lab Services

Certifications:

- JANS certified Diode Line
- MIL-19500 for JAN, JANTX, JANTXV
- MIL-STD-750 Lab Suitability Status
- ISO9001-2008 Certified



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