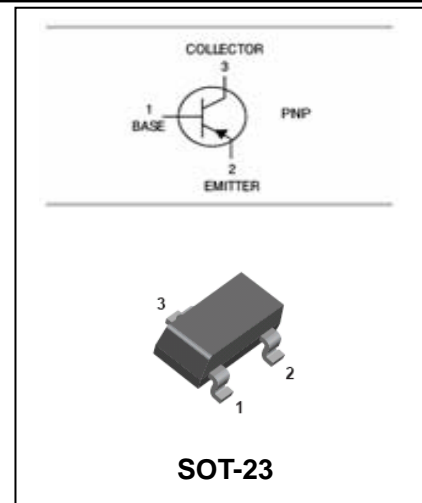


Silicon Epitaxial Planar Transistor

2SA1015

FEATURES

- Complementary To 2SC1815.
- Excellent H_{FE} Linearity.
- High total power dissipation.
- Collector current up to 150mA.
- Collector-Emitter voltage $BV_{CEO} = -50V$.



APPLICATIONS

- Low frequency , low noise amplifier.

ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| 2SA1015 | BA | SOT-23 |

MAXIMUM RATING @ $T_a = 25^\circ C$ unless otherwise specified

| Symbol | Parameter | Value | Units |
|----------------|----------------------------------|---------|------------|
| V_{CBO} | Collector-Base Voltage | -50 | V |
| V_{CEO} | Collector-Emitter Voltage | -50 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current -Continuous | -150 | mA |
| P_C | Collector Dissipation | 200 | mW |
| T_j, T_{stg} | Junction and Storage Temperature | -55~150 | $^\circ C$ |

Silicon Epitaxial Planar Transistor**2SA1015****ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|--|-----|-----|------|---------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C = -100\mu A, I_E = 0$ | -50 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C = -0.1mA, I_B = 0$ | -50 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E = -10\mu A, I_C = 0$ | -5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB} = -50V, I_E = 0$ | | | -0.1 | μA |
| Collector cut-off current | I_{CEO} | $V_{CE} = -50V, I_B = 0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -5V, I_C = 0$ | | | -0.1 | μA |
| DC current gain | h_{FE} | $V_{CE} = -6V, I_C = -2mA$ | 130 | | 400 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -100mA, I_B = -10mA$ | | | -0.3 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C = -100mA, I_B = -10mA$ | | | -1.1 | V |
| Transition frequency | f_T | $V_{CE} = -10V, I_C = -1mA$ $f = 30MHz$ | 80 | | | MHz |

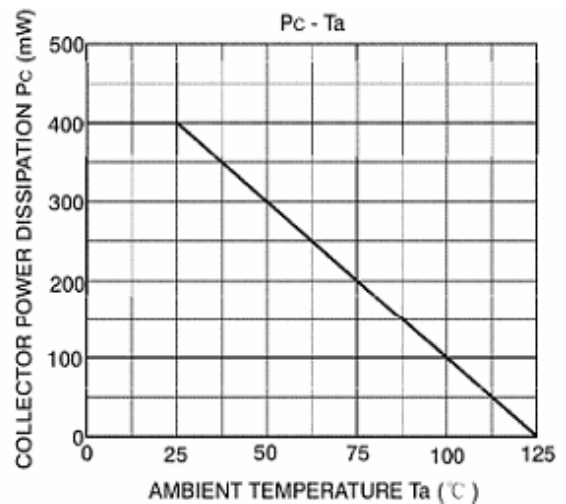
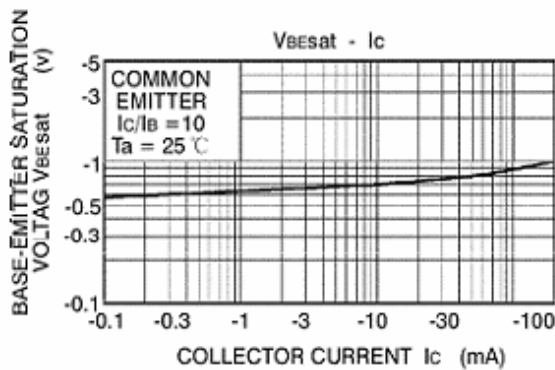
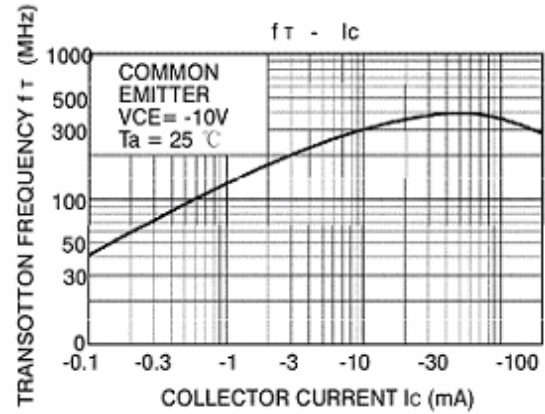
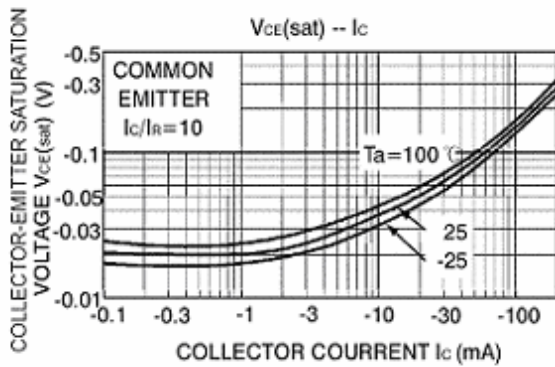
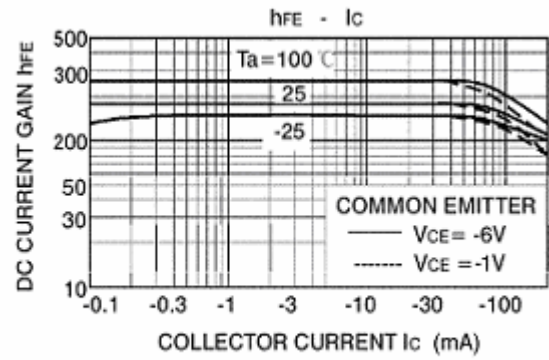
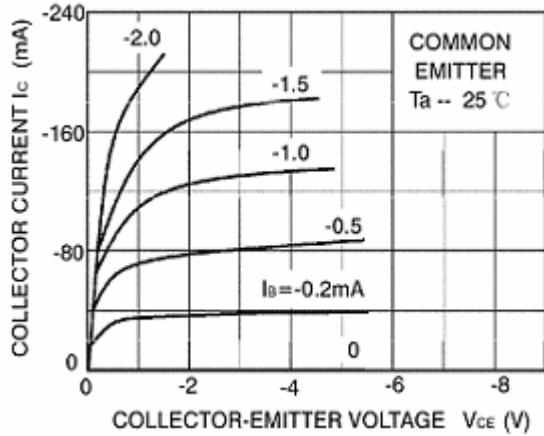
CLASSIFICATION OF $h_{FE(1)}$

| Rank | L | H |
|-------|---------|---------|
| Range | 130-200 | 200-400 |

Silicon Epitaxial Planar Transistor

2SA1015

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



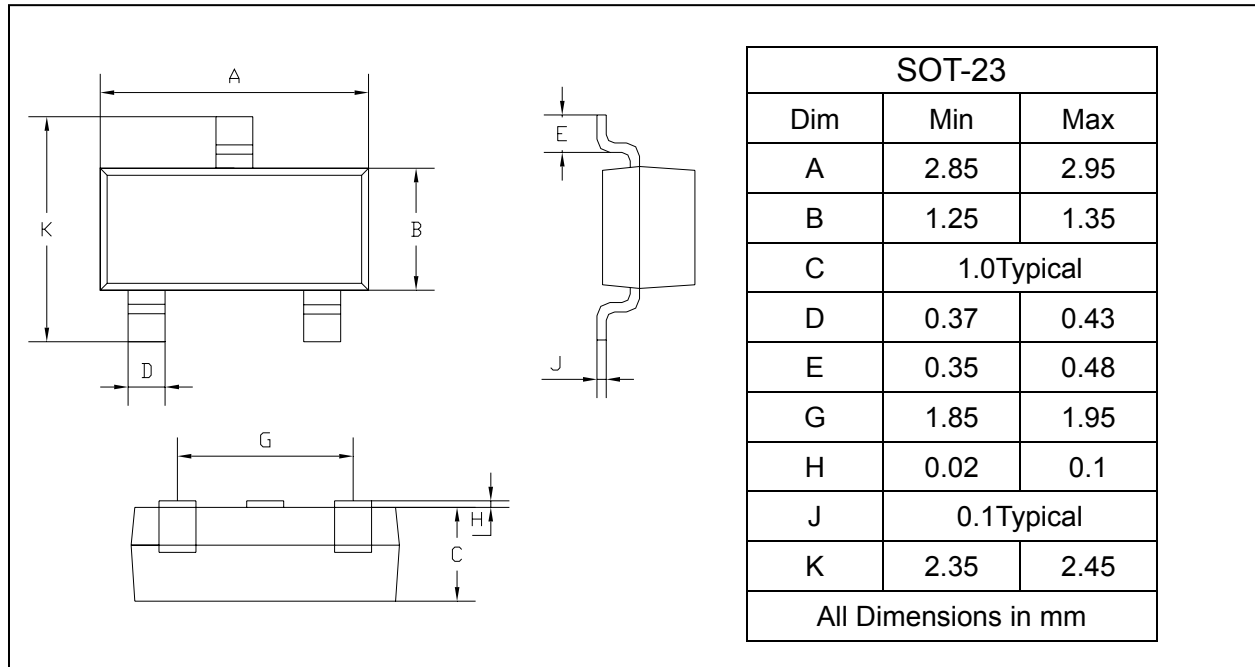
Silicon Epitaxial Planar Transistor

2SA1015

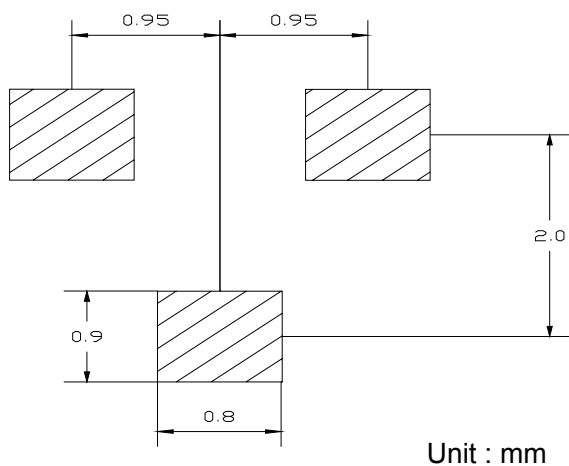
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

| Device | Package | Shipping |
|---------|---------|----------------|
| 2SA1015 | SOT-23 | 3000/Tape&Reel |

www.s-manuals.com