

VOLTAGE RANGE: 100 --- 1000 V

CURRENT: 5.0 A



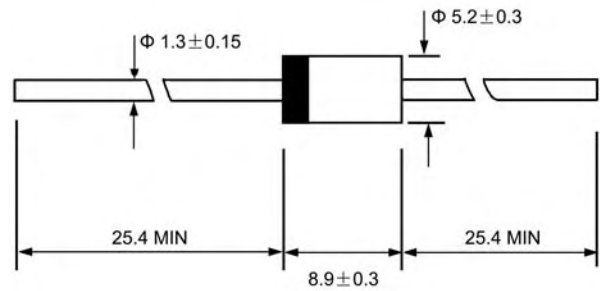
Features

- ✧ Low cost
- ✧ Diffused junction
- ✧ Low leakage
- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ Easily cleaned with Freon, Isopropanol and similar solvents

Mechanical Data

- ✧ Case: JEDEC DO-27, molded plastic
- ✧ Polarity: Color band denotes cathode
- ✧ Weight: 0.041 ounces, 1.15 grams
- ✧ Mounting position: Any

DO-27



Dimensions in millimeters

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 50 Hz, resistive or inductive load. For capacitive load, derate by 20%.

| | | 5A1 | 5A2 | 5A4 | 5A6 | 5A8 | 5A10 | UNITS |
|--|-----------------|----------------|-----|-----|-----|-----|------|--------------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ C$ | $I_{F(AV)}$ | 5.0 | | | | | | A |
| Peak forward surge current 10ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$ | I_{FSM} | 300 | | | | | | A |
| Maximum instantaneous forward voltage @5.0A | V_F | 1.2 | | | | | | V |
| Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$ | I_R | 10.0 100.0 | | | | | | μA |
| Typical junction capacitance (Note1) | C_J | 80 | | | | | | pF |
| Typical thermal resistance (Note2) | $R_{\theta JA}$ | 15 | | | | | | $^\circ C/W$ |
| Operating junction temperature range | T_J | - 55 ---- +150 | | | | | | $^\circ C$ |
| Storage temperature range | T_{STG} | - 55 ---- +150 | | | | | | $^\circ C$ |

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance from junction to ambient.

FIG.1 – FORWARD DERATING CURVE

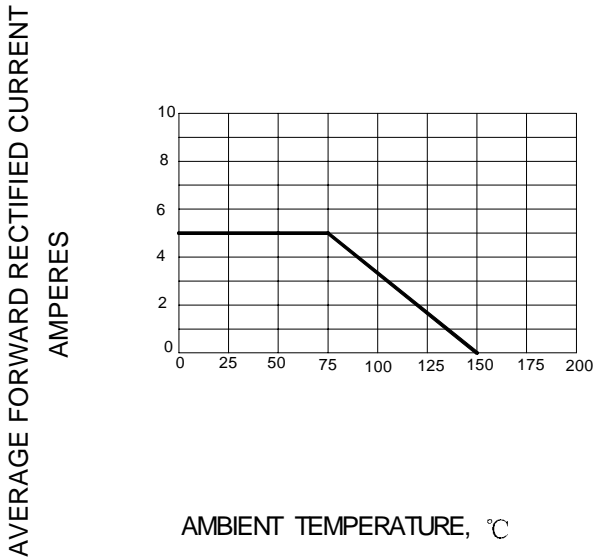


FIG.2 – TYPICAL FORWARD CHARACTERISTICS

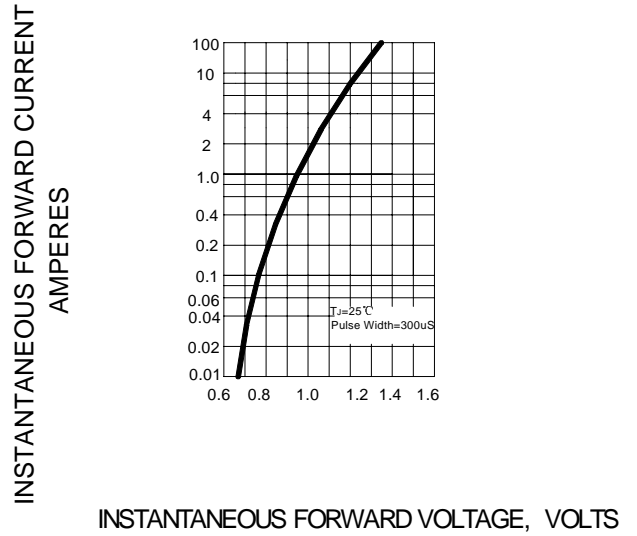


FIG.3 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

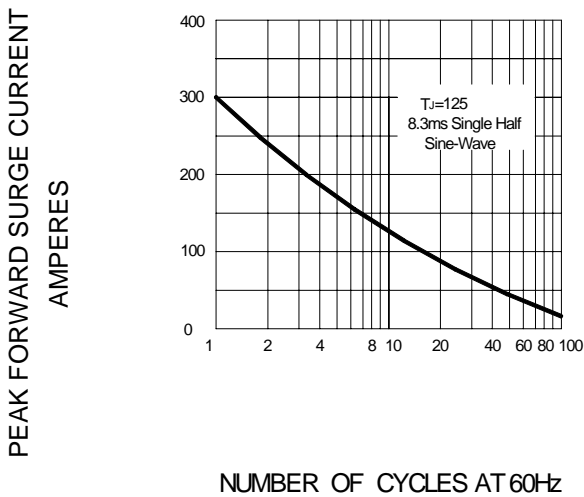


FIG.4 – TYPICAL JUNCTION CAPACITANCE

