

FEATURES

- For surface mounted applications
- High temperature metallurgically bonded-no compression contacts as found in other diode-constructed rectifiers
- Glass passivated junction
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Complete device submersible temperature of 260 °C for 10 seconds in solder bath

Mechanical Data

Case: JEDEC DO-214AC molded plastic

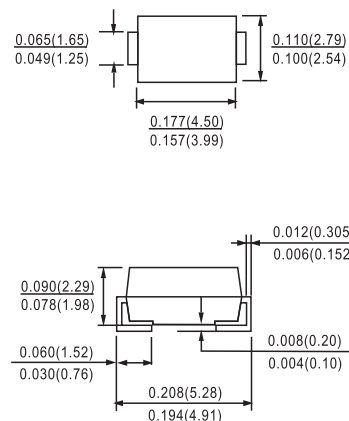
Terminals: Solder plated, solderable per MIL-STD-750,
Method 2026

Polarity: Indicated by cathode band

Standard packaging: 12mm tape (EIA-481)

Weight: 0.003 ounce, 0.093 gram

DO-214AC(SMA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Characteristic | Symbol | S2A | S2B | S2D | S2G | S2J | S2K | S2M | Unit | |
|---|-----------------|-------------|-----|-----|-----|-----|-----|------|------|------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Working Peak Reverse Voltage | V_{RWM} | | | | | | | | | |
| DC Blocking Voltage | V_R | | | | | | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Average Rectified Output Current @ $T_L = 110^\circ\text{C}$ | I_o | 2.0 | | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 60 | | | | | | | | A |
| Forward Voltage @ $I_F = 2.0\text{A}$ | V_{FM} | 1.10 | | | | | | | | V |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$ | I_{RM} | 5.0 200 | | | | | | | | μA |
| Reverse Recovery Time (Note 1) | t_{rr} | 2.5 | | | | | | | | μS |
| Typical Junction Capacitance (Note 2) | C_j | 30 | | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | $R_{\theta JL}$ | 16 | | | | | | | | K/W |
| Operating and Storage Temperature Range | T_j, T_{STG} | -55 to +150 | | | | | | | | $^\circ\text{C}$ |

- Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$,
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. Mounted on P.C. Board with 8.0mm² land area.

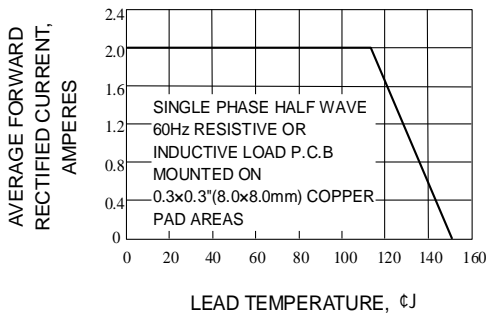


Fig. 1-FORWARD CURRENT DERATING CURVE

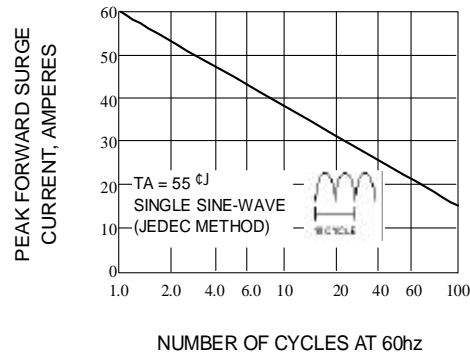


Fig. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

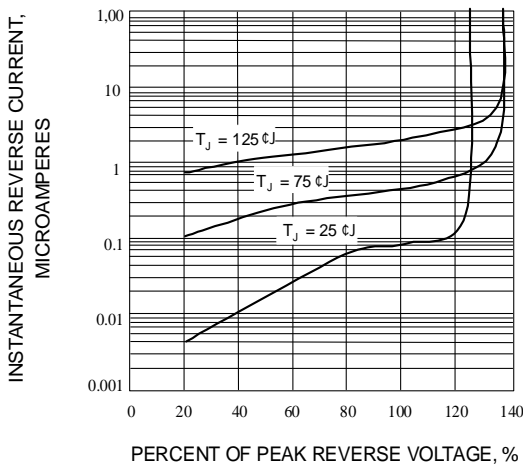


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

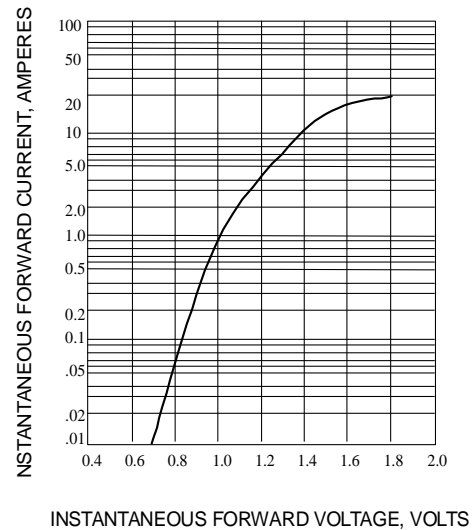


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

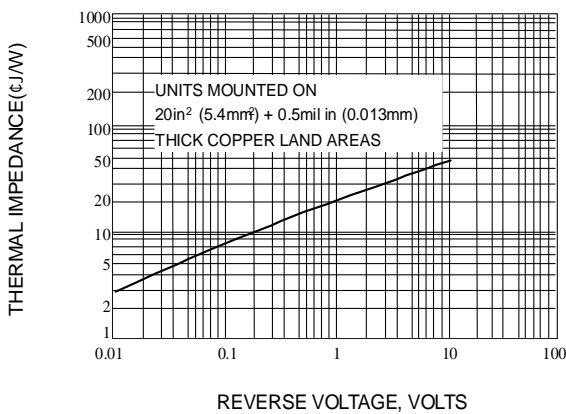


Fig. 5-TRANSIENT THERMAL IMPEDANCE

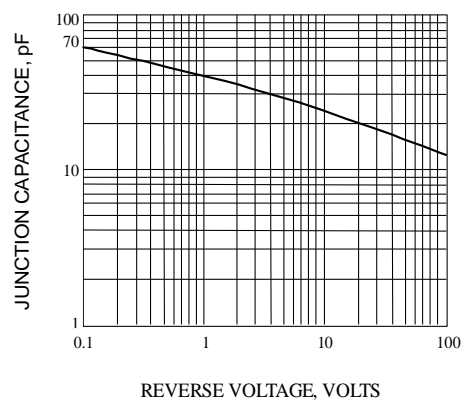


Fig. 6-TYPICAL JUNCTION CAPACITANCE