

TECHNICAL DATA
DATA SHEET 1026, REV. PRELIMINARY**HERMETIC POWER SCHOTTKY RECTIFIER**
Ultra Low Reverse Leakage
200°C Operating Temperature

(S-100 for JANTXV equivalent screening; SS for JANS equivalent screening available)

Applications:

- Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

Features:

- Ultra low Reverse Leakage Current
- Soft Reverse Recovery at Low and High Temperature
- Very Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability
- Guaranteed Reverse Avalanche Characteristics

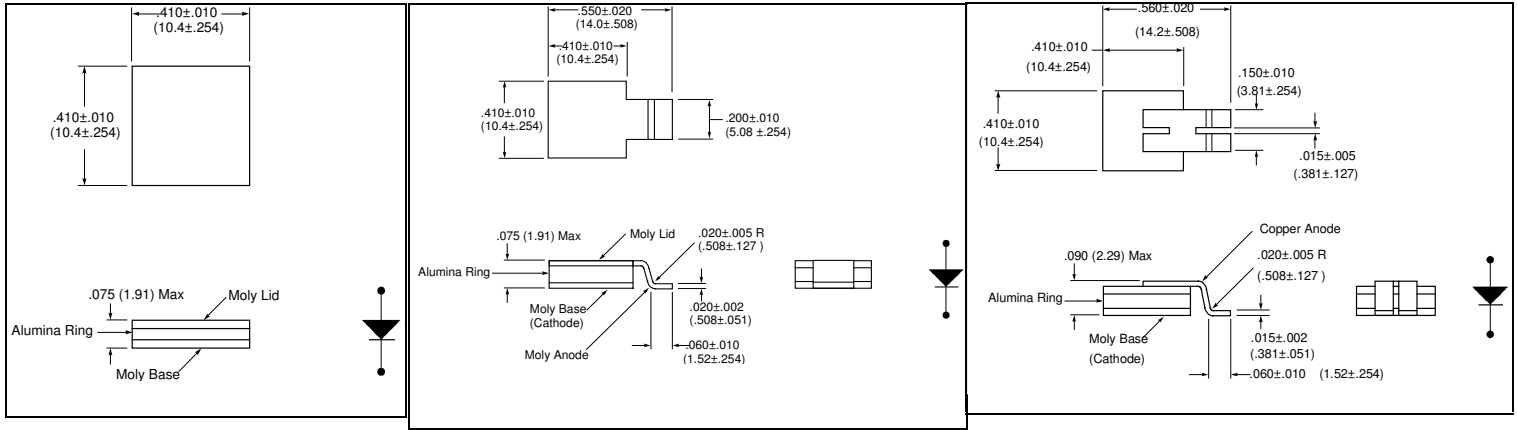
MAXIMUM RATINGSALL RATINGS ARE @ $T_C = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

| RATING | SYMBOL | MAX. | UNITS |
|--|-----------------|-------------|--------------------|
| PEAK INVERSE VOLTAGE | PIV | 100 | Volts |
| MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C = 100^\circ\text{C}$) | I_O | 60 | Amps |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t = 8.3\text{ms}$, Sine) | I_{FSM} | 860 | Amps |
| MAXIMUM JUNCTION CAPACITANCE ($V_r = 5\text{V}$) | C_T | 1500 | pF |
| MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode) | $R_{\theta JC}$ | 0.35 | $^\circ\text{C/W}$ |
| MAXIMUM STORAGE TEMPERATURE RANGE | T_{stg} | -65 to +175 | $^\circ\text{C}$ |
| MAXIMUM OPERATING TEMPERATURE RANGE | T_{op} | -65 to +200 | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS

| CHARACTERISTIC | SYMBOL | MAX. | UNITS |
|--|--------|--------------|-------|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 60\text{ Amps}$) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ | V_f | 0.87 0.72 | Volts |
| MAXIMUM REVERSE CURRENT ($I_r @ 100\text{ V PIV}$) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ | I_r | 0.03 3.0 | mA |

MECHANICAL DIMENSIONS: In Inches / mm

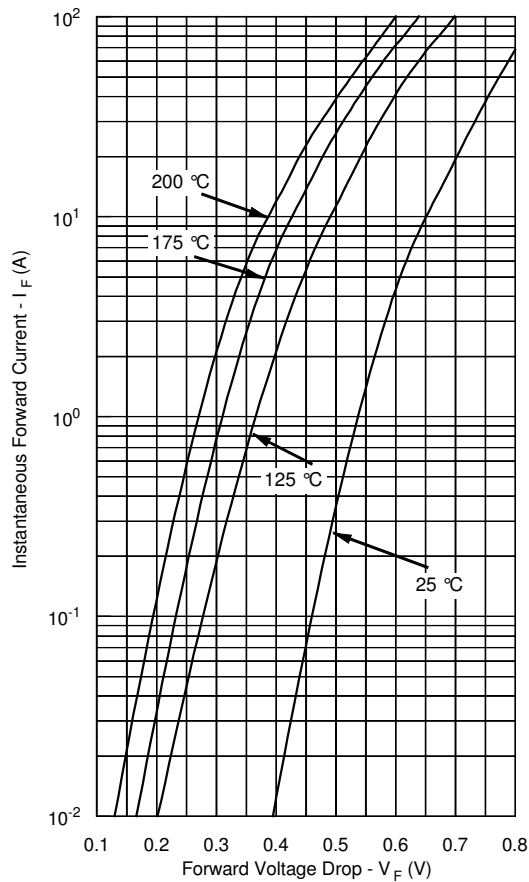


SHD-3

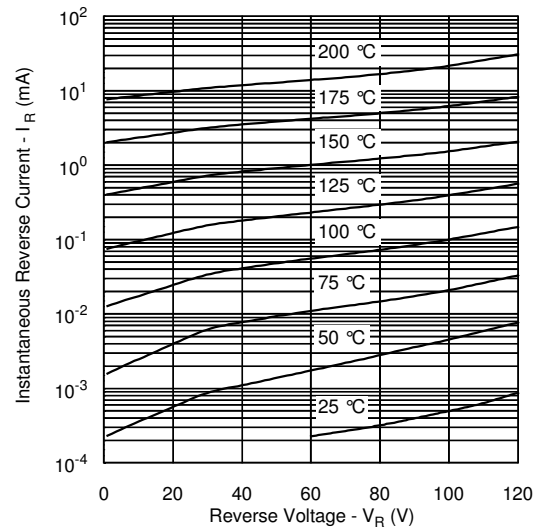
SHD-3A

SHD-3B

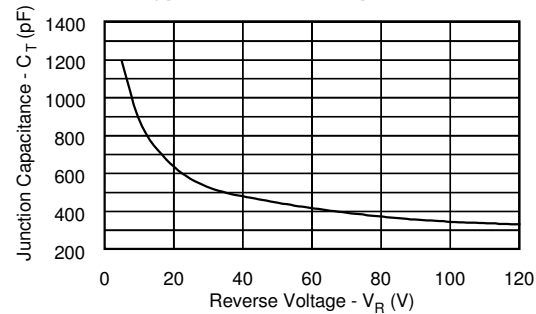
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



TECHNICAL DATA

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