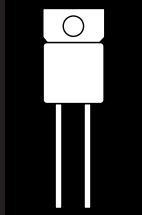


15 AMP SCHOTTKY RECTIFIER IN SMALL HERMETIC PACKAGE



15 Amp, 45 and 60 Volt Schottky Rectifier

FEATURES

- Small Size
- Very Low Forward Voltage
- Very Fast Switching Time
- Hermetic Metal Package
- Low Thermal Resistance
- Isolated Package
- 45V And 60V Reverse Voltage
- Available Screened To MIL-S-19500, TX, TXV And S Levels

DESCRIPTION

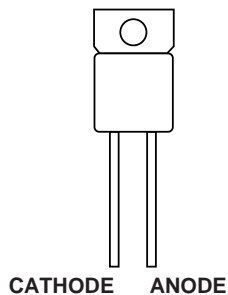
This product is specifically designed high density, high power applications where small size, light weight and high reliability are required. This product combines the latest Schottky semi-conductor technology mounted in an easy-to-use small hermetic isolated metal package. These devices are ideally suited for demanding high frequency applications such as switching power supplies and motor controls.

ABSOLUTE MAXIMUM RATINGS @ 25°C

Peak Inverse VoltageOM4001ST = 45V/OM4002ST = 60 V
Maximum Average D.C. Output Current @ $T_c = 100^\circ\text{C}$ 15 A
Peak Surge Current (Non-repetitive, 8.3ms) 150 A
Storage Temperature Range -55°C to 175°C
Junction Operating Temperature Range -55°C to 150°C
Package Thermal Resistance, Junction to Case 2.0°C/W

3.2

PIN CONNECTION



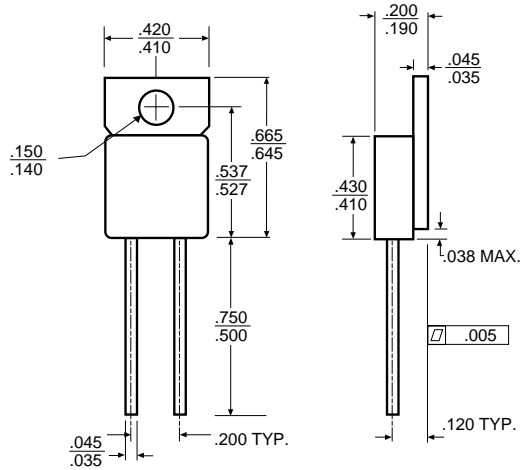
OM4001ST - OM4002ST

ELECTRICAL CHARACTERISTICS

| Symbol | Characteristic | Conditions | Limits | Type |
|-----------|--|---|--------|------|
| V_{RWM} | Working Peak Reverse | OM4001ST | 45 | V |
| | | OM4002ST | 60 | V |
| V_R | DC Blocking Voltage | OM4001ST | 45 | V |
| | | OM4002ST | 60 | V |
| i_R | Maximum Instantaneous Reverse Current* | $T_C = 25^\circ\text{C} @ V_R$ | 5 | mA |
| | | $T_C = 125^\circ\text{C} @ V_R$ | 150 | mA |
| V_F | Maximum Instantaneous Forward Voltage | $T_C = 25^\circ\text{C}, I_F = 15\text{A}$ | .750 | V |
| | | $T_C = 125^\circ\text{C}, I_F = 15\text{A}$ | .725 | V |
| C_t | Capacitance | $V_R = 5.0\text{V}$ | 800 | pf |

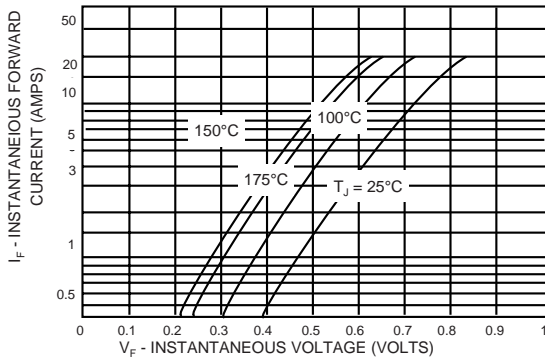
*Pulse Test Width = 300μsec, 2% Duty Cycle.

MECHANICAL OUTLINE



3.2

TYPICAL FORWARD VOLTAGE



TYPICAL REVERSE CURRENT

