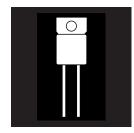
10 AMP SCHOTTKY RECTIFIER IN SMALL HERMETIC PACKAGE



10 Amp, 60 To 100 Volt Schottky Rectifiers

FEATURES

- Small Size
- · Very Low Forward Voltage
- · Low Recovered Charge
- · Rugged Package Design
- · High Efficiency for Low Voltage Supplies
- · Hermetic and Isolated Package
- Available Screened To MIL-S-19500, TX, TXV And S Levels

DESCRIPTION

This series of Schottky barrier diodes offers low forward voltage and high output current for its small package size. The OM4003 series was designed for demanding applications where small size, light weight and high reliability are required. These devices are ideal replacements for TO-3, DO-4 or DO-5 packages. All products are available Hi-Rel screened.

PIN CONNECTION

MECHANICAL OUTLINE

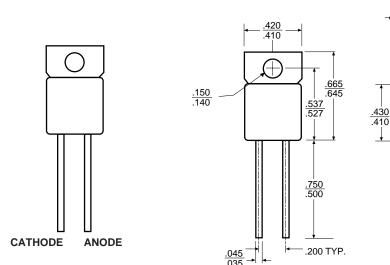
.200 .190

.045

¹.038 MAX.

.005

.120 TYP.



3.2

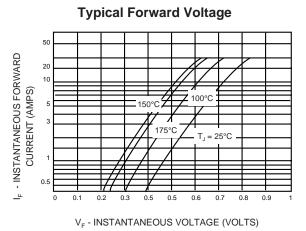
MAXIMUM RATINGS

| Rating | Symbol | ОМ | | | | | Unit |
|---|--------------------|-------------|------|------|------|------|-------|
| | | 4003 | 4004 | 4005 | 4006 | 4007 | |
| Peak Repetitive Reverse Voltage | V _{RRM} | 60 | 70 | 80 | 90 | 100 | Volts |
| Working Peak Reverse Voltage | V_{RWM} | | | | | | |
| DC Blocking Voltage | V_R | | | | | | |
| Average Rectified Forward Current (Rated V _R) T _C = 100° (| I _{F(AV)} | 10 | | | | | Amps |
| Peak Repetitive Forward Current | I _{FRM} | 20 | | | | | Amps |
| (Rated V _R , Square Wave, 20 kHz) T _C = 100° C | | | | | | | |
| Nonrepetitive Peak Surge Current | I _{FSM} | 150 | | | | | Amps |
| (Surge applied at rated load conditions halfwave, | | | | | | | |
| single phase, 60 Hz) | | | | | | | |
| Peak Repetitive Reverse Surge Current (2 µs, 1 kHz) | I _{RRM} | 0.5 | | | | | Amps |
| Operating Junction Temperature | T _J | -65 to +150 | | | | | °C |
| Storage Temperature | T _{stg} | -65 to +175 | | | | | ° C |
| THERMAL CHARACTERISTICS | | | | | | | |
| Maximum Thermal Resistance | R _{qJC} | 3 | | | | | ° C/W |
| ELECTRICAL CHARACTERISTICS | | • | | | | | |
| Maximum Instantaneous Forward Voltage (1) | V _F | | | | | | Volts |
| (i _F = 10 Amp, T _C = 125° C) | | .725 | | | | | |
| (i _F = 10 Amp, T _C = 25° C) | | .825 | | | | | |
| Maximum Instantaneous Forward Reverse Current (1) | i _R | | | | | | mA |
| (Related dc Voltage, T _C = 125° C) | | | | 150 | | | |

(1) Pulse Test: Pulse Width = 300 µs, Duty Cycle 2%

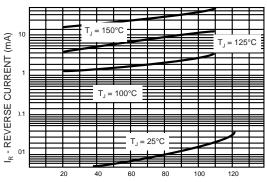
(Related dc Voltage, $T_C = 25^{\circ} C$)

3.2



Typical Reverse Current

5



 V_R - REVERSE VOLTAGE (VOLTS)