



# MUR460

## SUPER FAST RECOVERY SILICON RECTIFIER

VOLTAGE RANGE 600 Volts

CURRENT 4.0 Amperes

### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Super fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:  
250°C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension

### MECHANICAL DATA

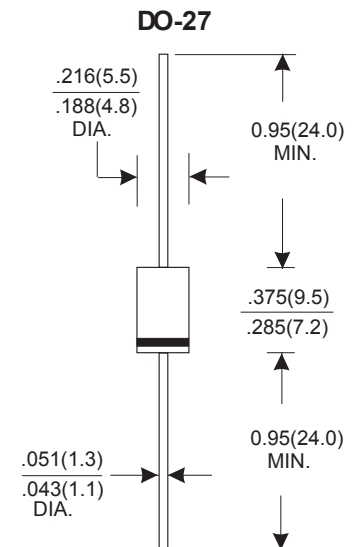
**Case:** JEDEC DO-27 molded plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 1.04 grams



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Type Number                                                                                                   | Symbol          | MUR460      | Units                          |
|---------------------------------------------------------------------------------------------------------------|-----------------|-------------|--------------------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                        | $V_{RRM}$       | 600         | V                              |
| Maximum RMS Voltage                                                                                           | $V_{RMS}$       | 420         | V                              |
| Maximum DC Blocking Voltage                                                                                   | $V_{DC}$        | 600         | V                              |
| Maximum Average Forward Rectified Current<br>.375" (9.5mm) Lead Length (See Fig. 1)                           | $I_{(AV)}$      | 4.0         | A                              |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated Load<br>(JEDEC method)      | $I_{FSM}$       | 125         | A                              |
| Maximum Instantaneous Forward Voltage<br>@ 4.0A                                                               | $V_F$           | 1.30        | V                              |
| Maximum DC Reverse Current @ $T_C=25^\circ\text{C}$<br>at Rated DC Blocking Voltage @ $T_C=125^\circ\text{C}$ | $I_R$           | 10<br>250   | $\mu\text{A}$<br>$\mu\text{A}$ |
| Maximum Reverse Recovery Time (Note 1)                                                                        | $T_{RR}$        | 50          | nS                             |
| Typical Junction Capacitance (Note 2)<br>$T_J = 25^\circ\text{C}$ (Fig. 5)                                    | $C_j$           | 65          | pF                             |
| Maximum Forward Recovery Time TFR<br>( $I_F=1.0\text{A}$ , $di/dt = 100\text{A}/\mu\text{s}$ , Rev. to 1.0V)  | $T_{FR}$        | 50          | nS                             |
| Typical Thermal Resistance (Note 3)                                                                           | $R_{\theta JA}$ | 28          | $^\circ\text{C}/\text{W}$      |
| Operating Temperature Range                                                                                   | $T_J$           | -65 to +150 | $^\circ\text{C}$               |
| Storage Temperature Range                                                                                     | $T_{STG}$       | -65 to +150 | $^\circ\text{C}$               |

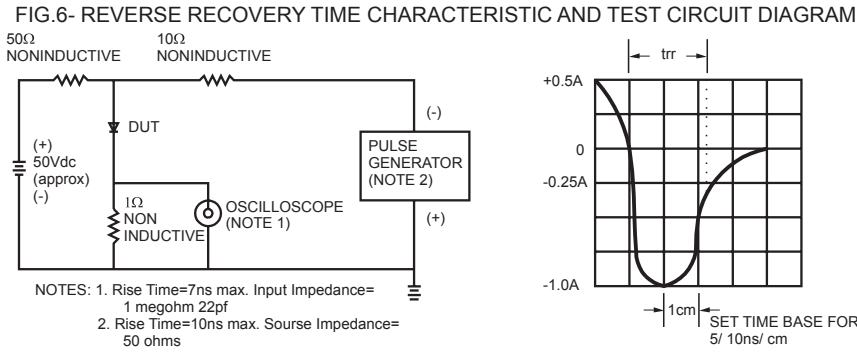
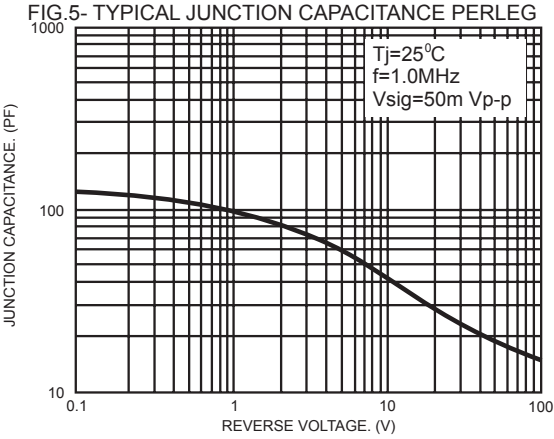
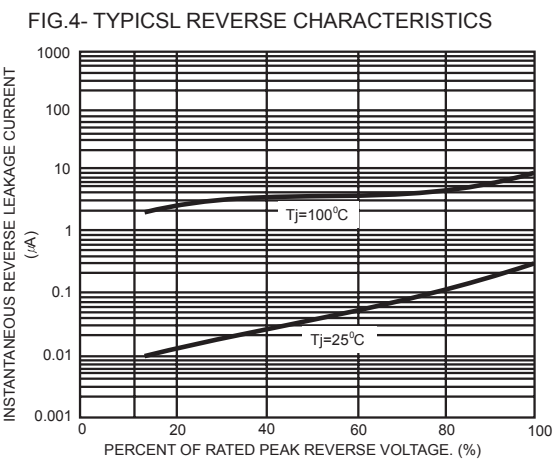
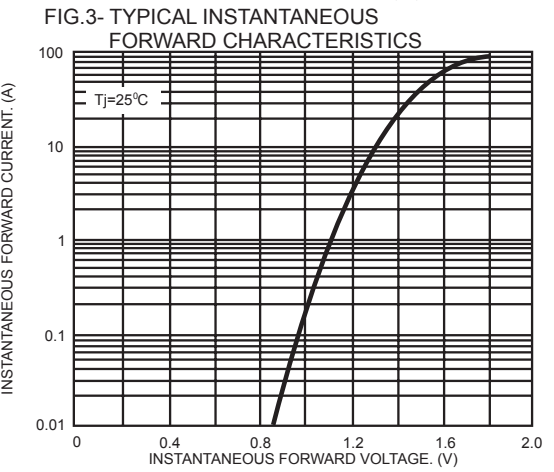
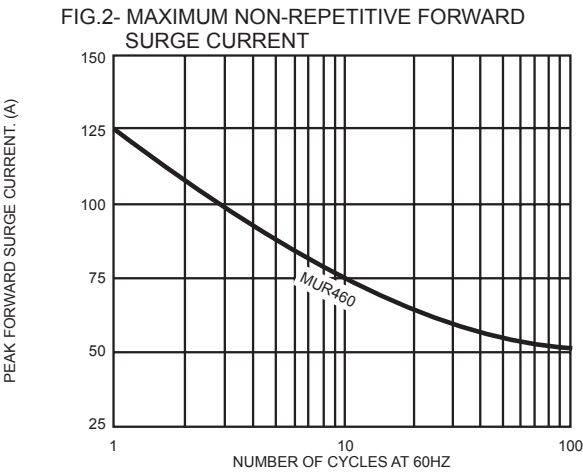
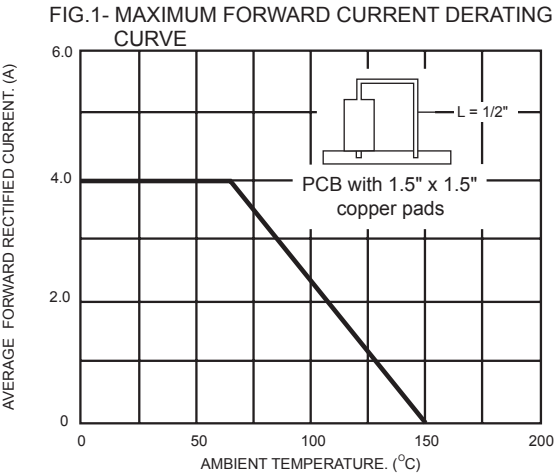
**Note:** 1. Reverse recovery condition  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

MUR460



The cruve graph is for reference only can't be the basis for judgment( 曲线图仅供参考)!