

**SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIERS**

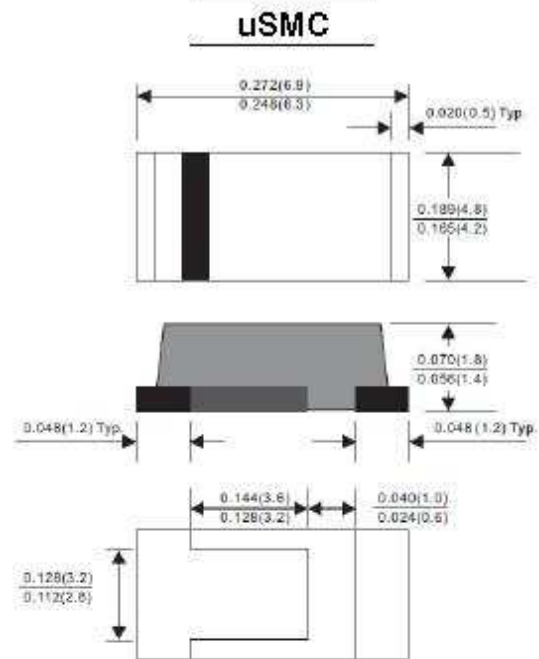
REVERSE VOLTAGE - 50 Volts  
FORWARD CURRENT - 10 Amps

**FEATURES**

- Low profile package in order to optimize board space
- Low power losses, high efficiency
- High current & High surge capability
- Low forward voltage drop
- Ultra high speed switching
- Lead-free plating
- Halogen-free with suffix (-H)

**MECHANIAL DATA**

- Case : Molded plastic, uSMC
- Epoxy : UL94-V0 rated flame retardant
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Laser band denotes cathode end
- Weight : 0.156 gram



Dimensions in inches (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient tempertaure unless otherwise specified.  
Single phase, half wave, 60HZ, resistive or inductive load.  
For capacitive load, derate current by 20%

| CHARATERISTICS  | SYMBOL                    | 10V050               | UNIT                      |
|---|---------------------------|----------------------|---------------------------|
| Maximum Repetitive Peak Reverse Voltage   | $V_{RRM}$                 | 50                   | V                         |
| Maximum RMS Voltage   | $V_{RMS}$                 | 35                   | V                         |
| Maximum DC Blocking Voltage   | $V_{DC}$                  | 50                   | V                         |
| Maximum Average Forward Rectified Current   | $I_{(AV)}$                | 10                   | A                         |
| Peak Forward Surge Current<br>8.3ms Single Half-Sine-Wave<br>Super Imposed On Rated Load (JEDEC Method) | $I_{FSM}$                 | 320                  | A                         |
| Maximum Forward Voltage at 10A DC   | $V_F$                     | 0.47 TYP<br>0.55 MAX | V                         |
| Maximum DC Reverse Current at Rated<br>DC Blocking Volatge  | @ $T_j=25^\circ\text{C}$  | 0.5                  | mA                        |
|   | @ $T_j=100^\circ\text{C}$ | 50                   |                           |
| Thermal Resistance From Junction to Ambient   | $R_{\theta JA}$           | 30                   | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range   | $T_j$                     | -50 to +150          | $^\circ\text{C}$          |
| Storage Temperature Range   | $T_{STG}$                 | -65 to +175          | $^\circ\text{C}$          |

TYPICAL CHARACTERISTIC CURVES ( $T_j=25^{\circ}\text{C}$ , UNLESS OTHERWISE NOTED)

FIG.1 - FORWARD CURRENT RERATING CURVE

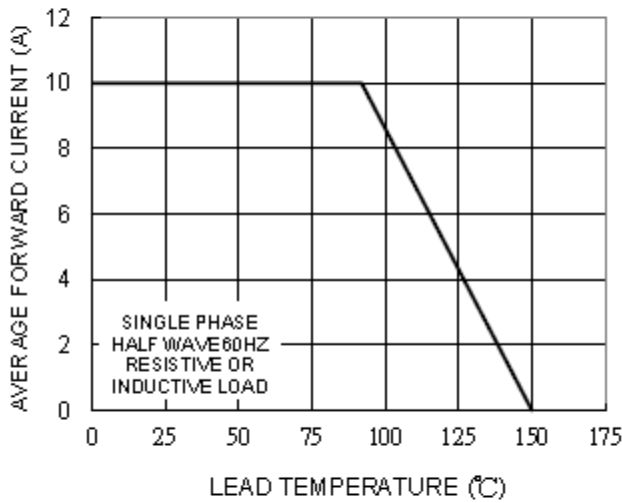


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

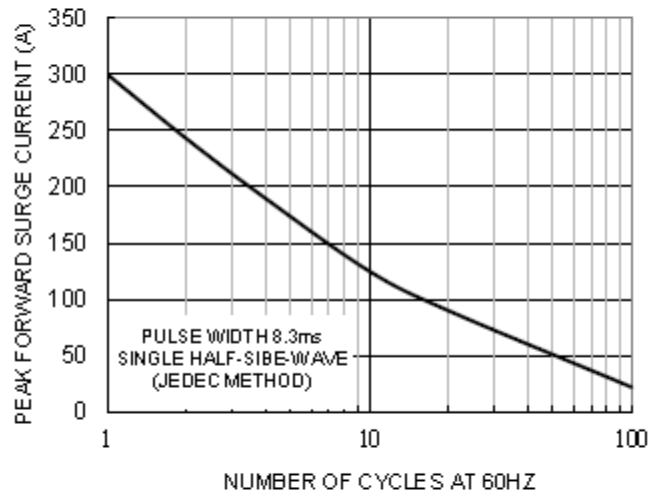


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

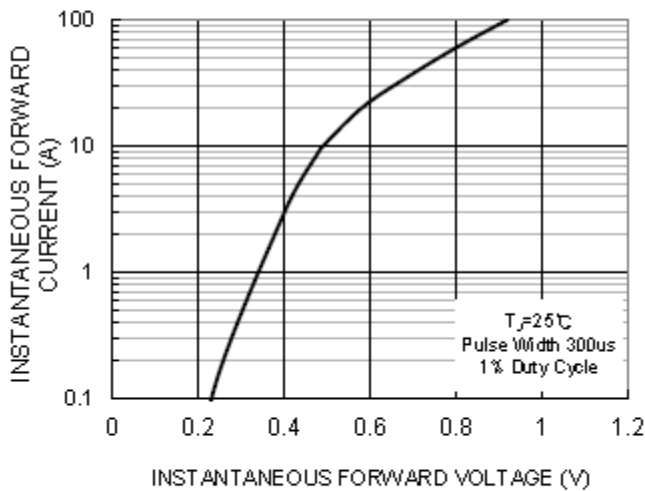


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

