

**SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - 50 Volts  
FORWARD CURRENT - 10 Amps

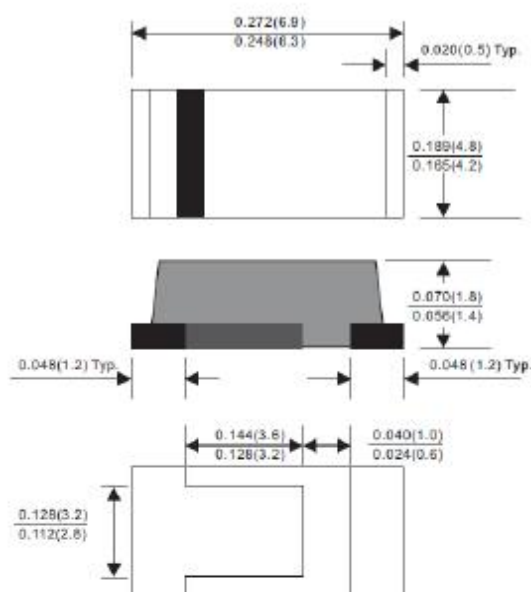
**FEATURES**

- 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

**uSMC**



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 8.3ms Single Half-Sine-Wave Super Imposed On Rated Load (JEDEC Method)	$I_{FSM}$	320	A
Maximum Forward Voltage at 10A DC	$V_F$	0.47 TYP 0.55 MAX	V
Maximum DC Reverse Current at Rated DC Blocking Volatge	$I_R$	@ $T_J=25^{\circ}C$	0.5
		@ $T_J=100^{\circ}C$	50
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	30	$^{\circ}C/W$
Operating Temperature Range	$T_J$	-50 to +150	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-65 to +175	$^{\circ}C$

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

FIG.1 - FORWARD CURRENT RERATING CURVE

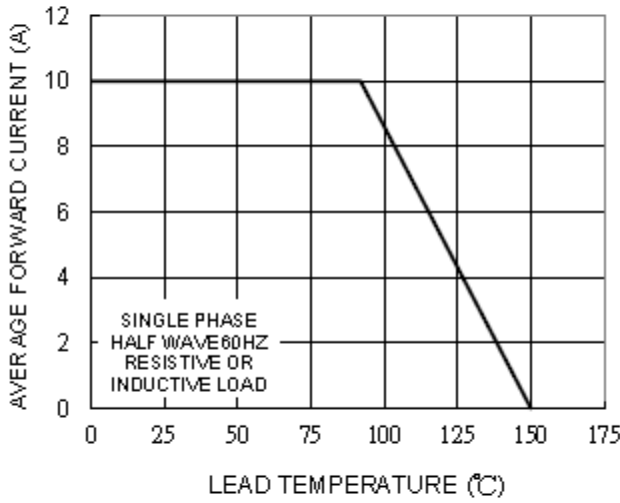


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

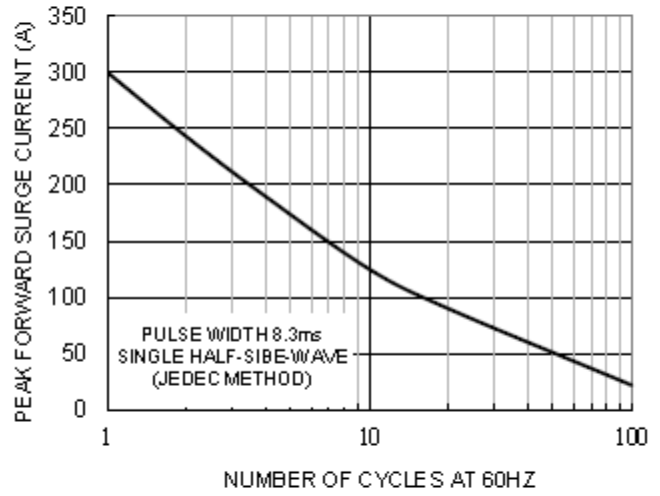


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

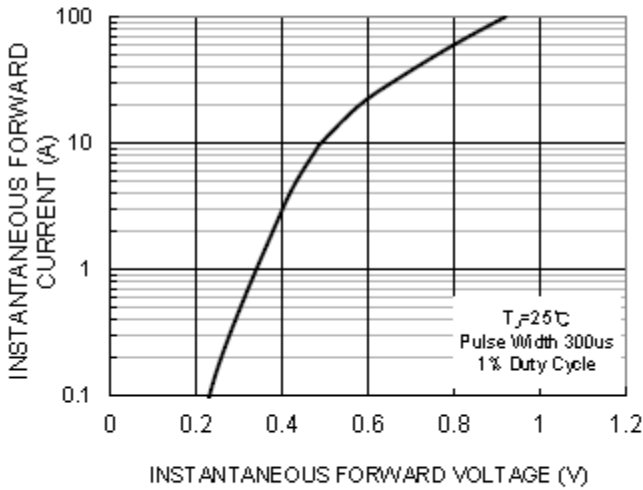


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

