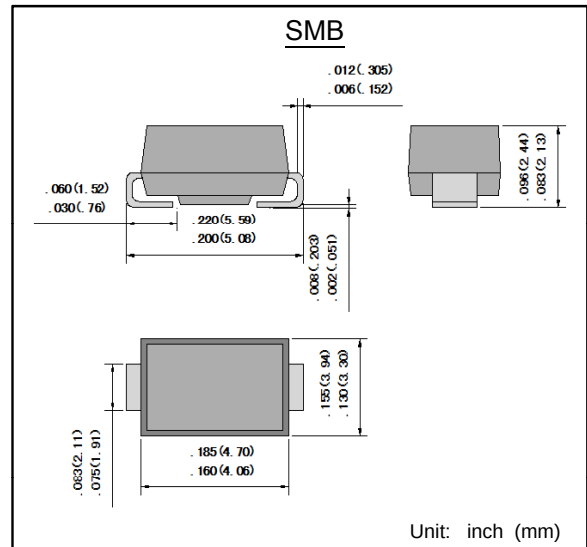


**SURFACE MOUNT ULTRA FAST RECTIFIER****Features**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Ultra fast switching for high efficiency
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
250 °C/10 seconds at terminals

Mechanical Data**Case** : JEDEC DO-214AA/SMB Molded plastic body**Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026**Polarity** : Polarity symbol marking on body**Mounting Position** : Any**Weight** : 0.003 ounce, 0.095 grams**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%.

Parameter	SYMBOLS	US2MB-SMB-60M	UNITS
Marking Code			
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC blocking voltage	V_{DC}	1000	V
Maximum average forward rectified current at $T_L=125^\circ\text{C}$	$I_{(AV)}$	2	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50	A
Maximum instantaneous forward voltage at 2.0A	V_F	1.65	V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	5 100	μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	75	ns
Typical junction capacitance (NOTE 2)	C_J	20	pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	60	$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

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

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

3. P.C.B. mounted with 2.0"x2.0" (5.0x5.0cm) copper pad areas



Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

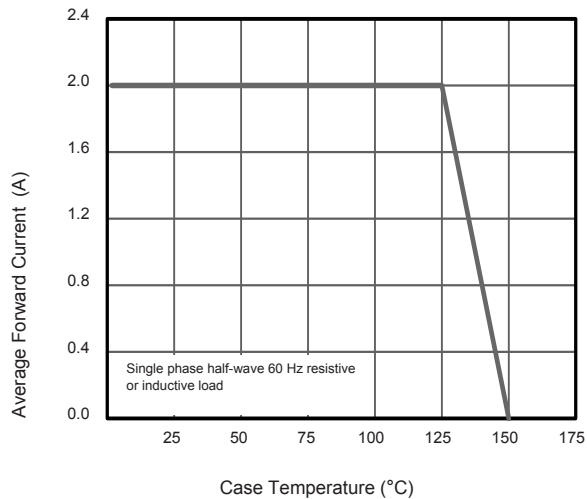


Fig.2 Typical Reverse Characteristics

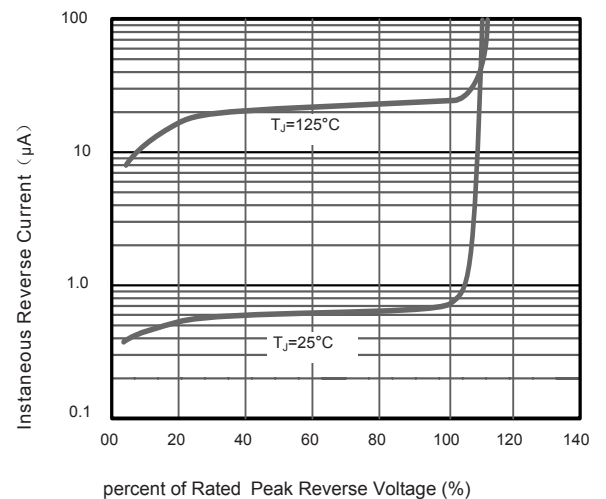


Fig.3 Typical Forward Characteristics

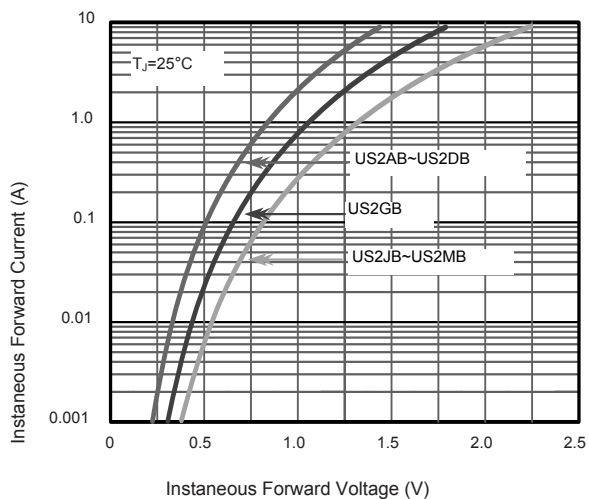
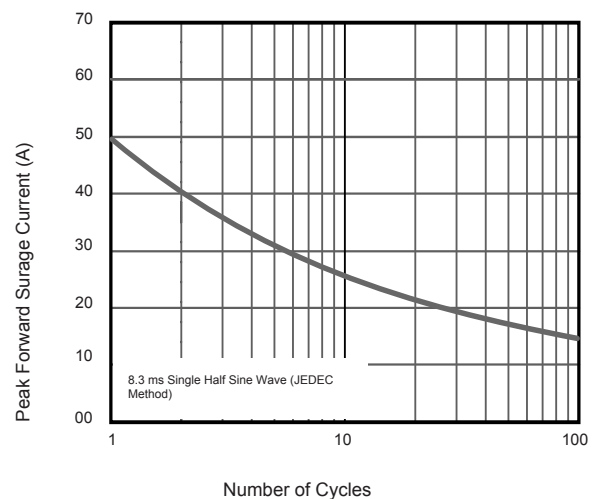


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.