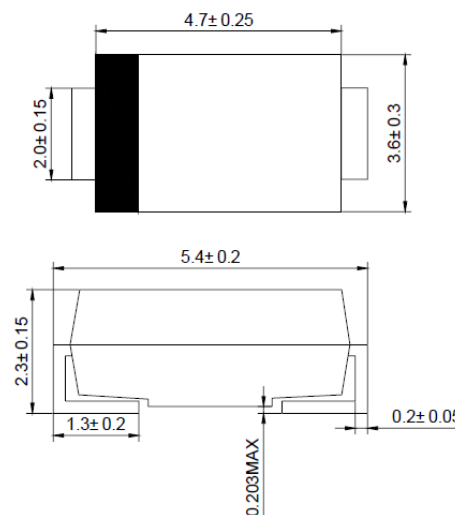


FEATURES

- Voltage Range 50 to 1000 Volts
- Glass passivated chip junction
- Very Fast Recovery
- Low forward voltage drop
- High surge current capability
- High temperature soldering: 260°C/10 seconds at terminals
- Miniature Size for 3 amps

MECHANICAL DATA

- Molded plastic body (UL 94 V-0 Rated)
- Solder plated terminals
- Polarity: Indicated by cathode band
- Packaging: 12mm tape EIA STD RS-481
- Weight: 0.093 gram



SMB (DO-214AA)

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	US3AB	US3BB	US3DB	US3GB	US3JB	US3KB	US3MB	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_L = 110^\circ\text{C}$	$I_F (AV)$	3.0							μA
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100							μA
Maximum Instantaneous Forward Voltage @1.0A	V_F	1.0				1.7			V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ At rated DC blocking voltage @ $T_A = 125^\circ\text{C}$	I_R	10.0				500			μA
Reverse Recovery Time (Note 1.)	t_{rr}	50				75			nS
Junction Thermal Resistance (Note 2.)	$R_{\theta JA}$ $R_{\theta JL}$	25							$^\circ\text{C} / \text{W}$
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

NOTE: 1. Reverse Recovery Test conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$.
2. Measured on P.C. Board with 0.2x0.2"(5.0x5.0mm) Copper Pad Areas.

RATING & CHARACTERISTIC CURVES

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

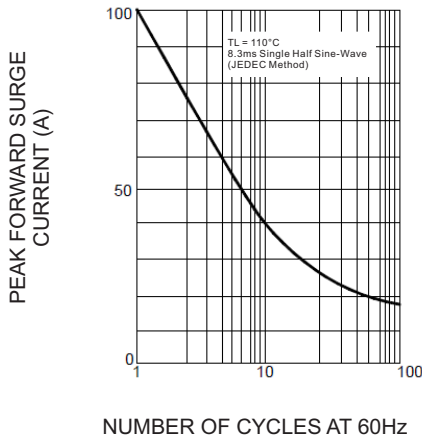


FIG. 2 - MAXIMUM CURRENT DERATING CURVE

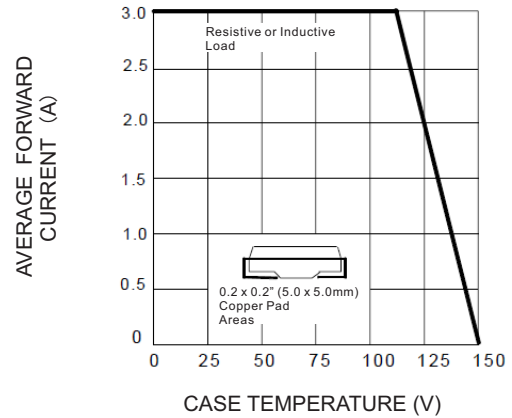


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

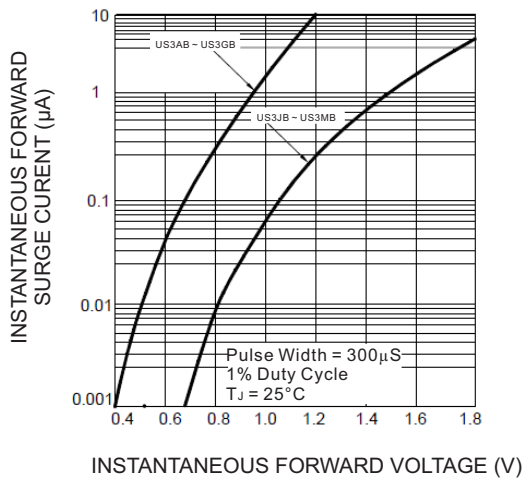


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

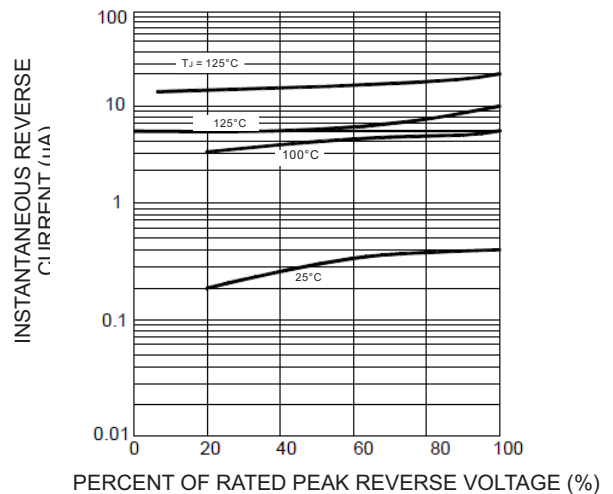


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

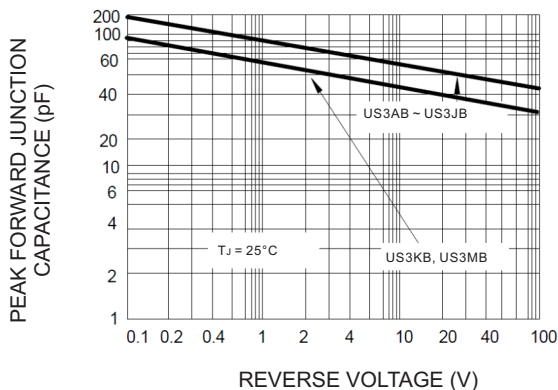


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

