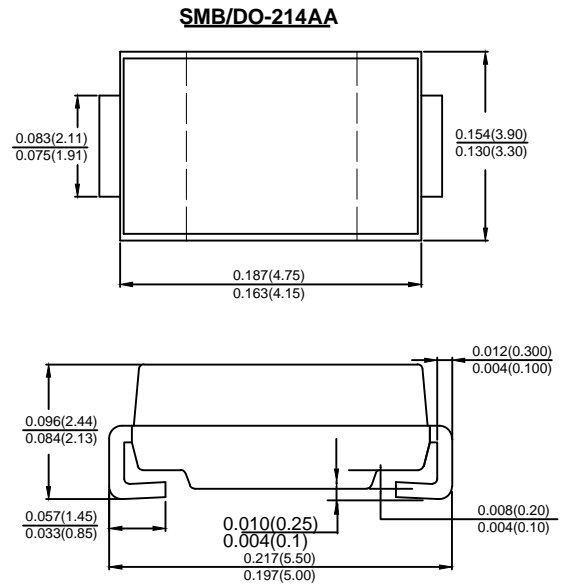


Features

- Glass passivated junction chip
- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: Molded plastic SMB
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number



Dimensions in inches and (millimeters)

Maximum Ratings and 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%

Type Number	SYMBOL	ER1AN	ER1BN	ER1CN	ER1DN	ER1EN	ER1GN	ER1JN	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Average Rectified Output Current @ $T_L = 55^\circ C$	I_o	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Forward Voltage @ $I_F = 1.0A$	V_{FM}	0.95			1.25		1.7		V
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	5.0							uA
At Rated DC Blocking Voltage @ $T_A = 100^\circ C$		100							
Maximum Reverse Recovery Time (Note 1)	T_{rr}	35							ns
Typical Junction Capacitance (Note 2)	C_J	10							pF
Typical Thermal Resistance Junction to Ambient (Note 3)	$R_{\theta JA}$	34							$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150							$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ C$

- Note:
1. Reverse Recovery Test Conditions: $I_F = 0.5A$, $I_R = 1.0A$, $IRR = 0.25A$.
 2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C.
 3. Thermal Resistance from Junction to Ambient at 0.375(9.5mm) lead length.

ER1AN THRU ER1JN

FIG.1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

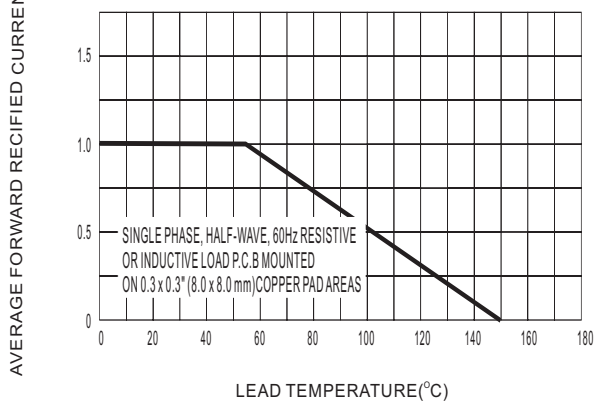


FIG.2 TYPICAL FORWARD CHARACTERISTICS

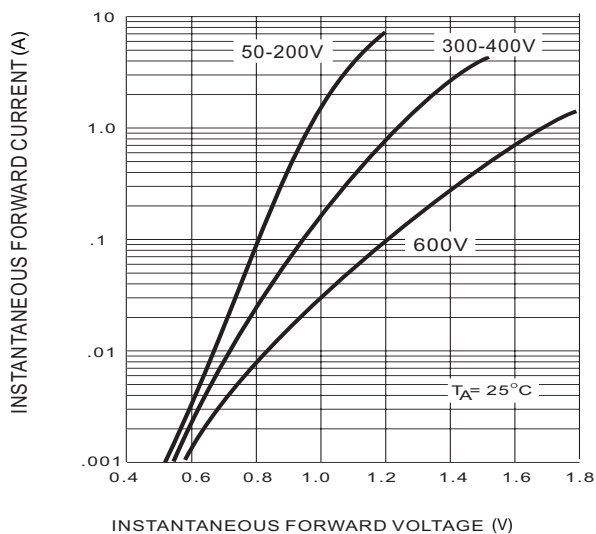


FIG.3 MAXIMUM NON-REPEITIVE SURGE CURRENT

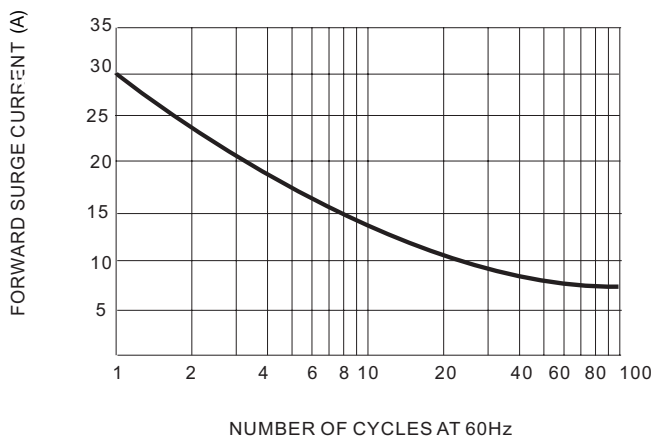


FIG.4 TYPICAL JUNCTION CAPACITANCE

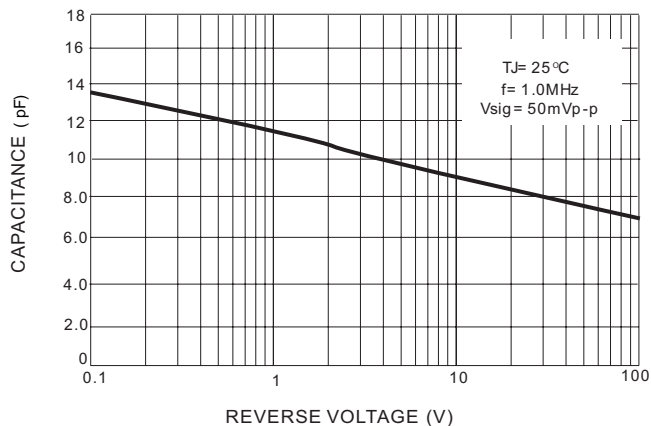


FIG.5 TYPICAL REVERSE CHARACTERISTICS

