

Features

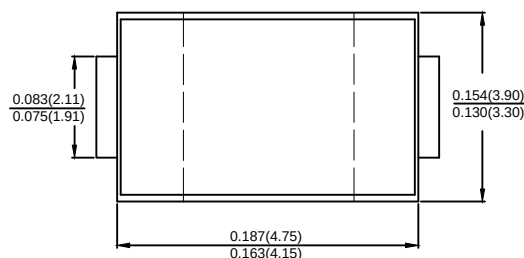
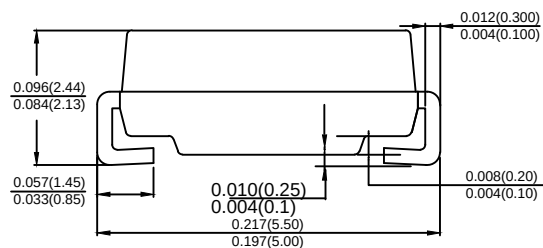
- Deally Suited for Automatic Assembly
- Low Power Loss,High Efficiency
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability

Classication Rating 94V-0

Mechanical Data

- Case: Molded plastic SMB
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity:Cathode Band or Cathode Notch
- Mounting Position: Any
- Making: Type Number

SMB/DO-214AA



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	FR1AU	FR1BU	FR1DU	FR1GU	FR1JU	FR1KU	FR1MU	Unit
Maximum Recurrent 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
Average Rectified Output Current @T _L =55℃	I _o	1.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	35							A
Forward Voltage @IF=1.0A	V _{FM}	1.3							V
Peak Reverse Current @T _A =25℃	I _R	5.0							uA
At Rated DC Blocking Voltage @T _A =100℃		100							
Maximum Reverse Recovery Time(Note 1)	T _{rr}	150				250	500		ns
Typical Junction Capacitance (Note 2)	C _J	12							pF
Typical Thermal Resistance Junction to Ambient(Note 3)	R _{θJA}	100							℃/W
	R _{θJL}	32							
Operating Temperature Range	T _J	-55 to+150							℃
Storage Temperature Range	T _{STG}	-55 to +150							℃

Note: 1.Reverse Recovery Test Conditions: $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$.

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

3. 8.0mm² (.013mm thick) land areas.

FIG.1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

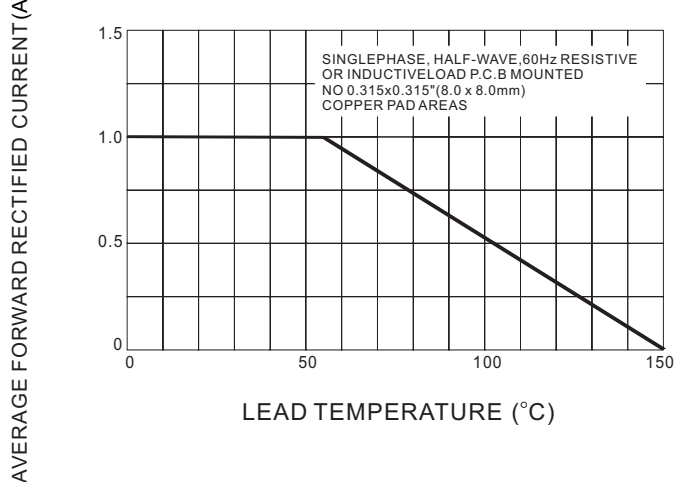


FIG.2 TYPICAL FORWARD CHARACTERISTICS

INSTANTANEOUS FORWARD CURRENT (A)

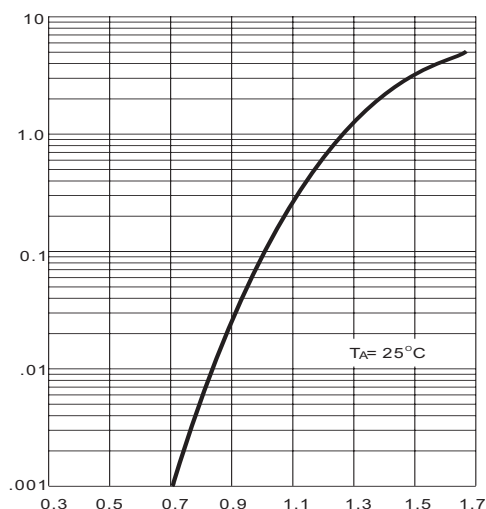


FIG.3 MAXIMUM NON-REPEITIVE SURGE CURRENT

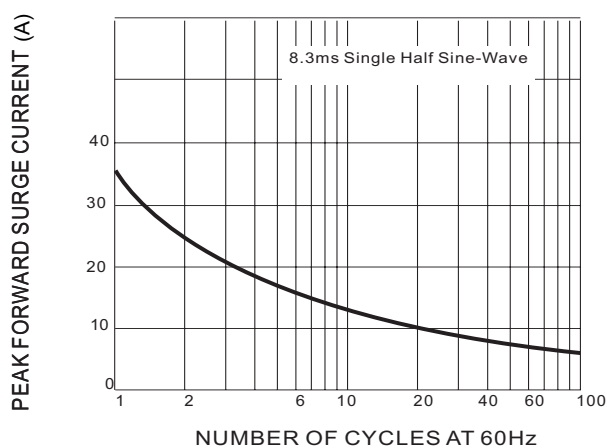


FIG.4 TYPICAL JUNCTION CAPACITANCE

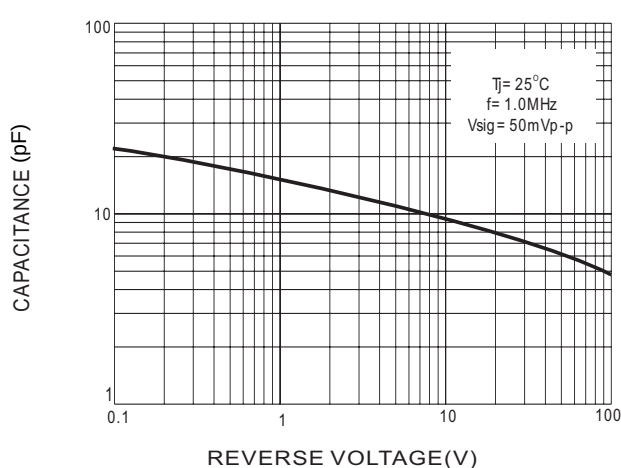


FIG.5 TYPICAL REVERSE CHARACTERISTICS

