



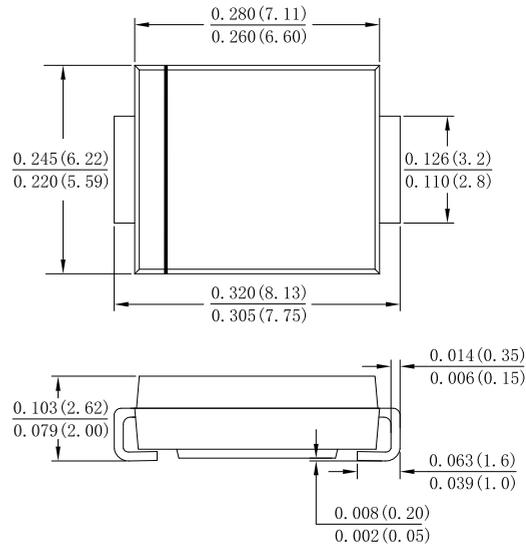
S8AC THRU S8MC

8.0 AMP Surface Mount Passivated Rectifiers

Features

- Glass Passivated Die Construction
- Low forward voltage drop
- High current capability
- High reliability
- Metal silicon junction, majority carrier conduction
- Plastic Case Material has UL Flammability
- Classification Rating 94V-0

Case: SMC(DO-214AB)



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic SMC
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: as marked on case
- Mounting Position: Any
- Making: Type Number

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	Symbols	S8AC	S8BC	S8DC	S8GC	S8JC	S8KC	S8MC	Units
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 @ $T_C = 110^\circ C$	$I_{F(AV)}$	8.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave @ $T_j = 125^\circ C$ Superimposed On Rated Load (JEDEC Method)	I_{FSM}	200 160							A
Non-Repetitive Peak Forward Surge Current 1.0ms Single half sine-wave @ $T_j = 125^\circ C$ Superimposed On Rated Load (JEDEC Method)	I_{FSM}	400 320							A
10000 times of the wave surge current (time width 1ms, time interval 3s)	I_{FSM}	150							A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	166							A^2S
Forward Voltage @ $I_F = 8.0A$	V_F	1.0							V
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	5.0							uA
At Rated DC Blocking Voltage @ $T_A = 125^\circ C$		100							
Typical Junction Capacitance (Note 1)	C_J	65							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	75							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ C$

Note:

1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
2. Thermal Resistance Junction to Lead.



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FIG.1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

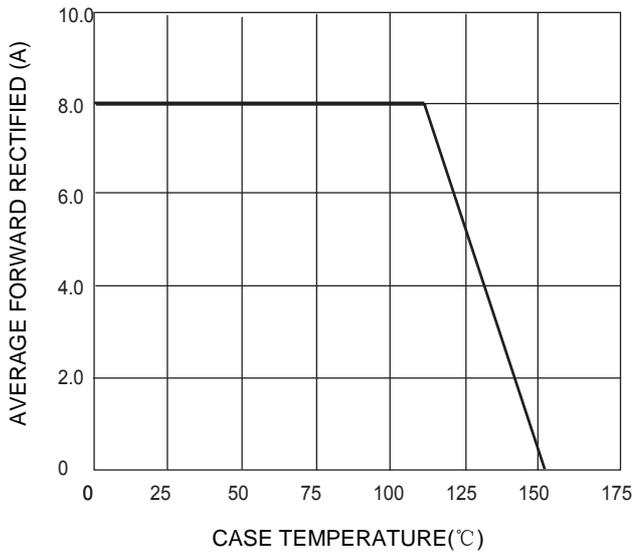


FIG.2 TYPICAL FORWARD CHARACTERISTICS

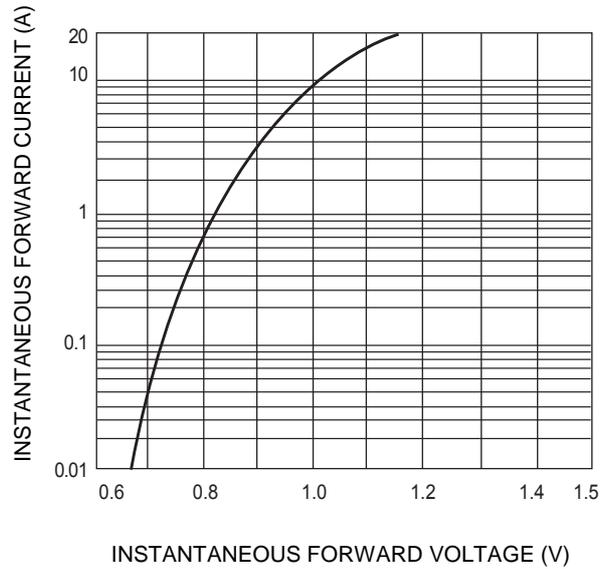


FIG.3 MAXIMUM NON-REPEITIVE SURGE CURRENT

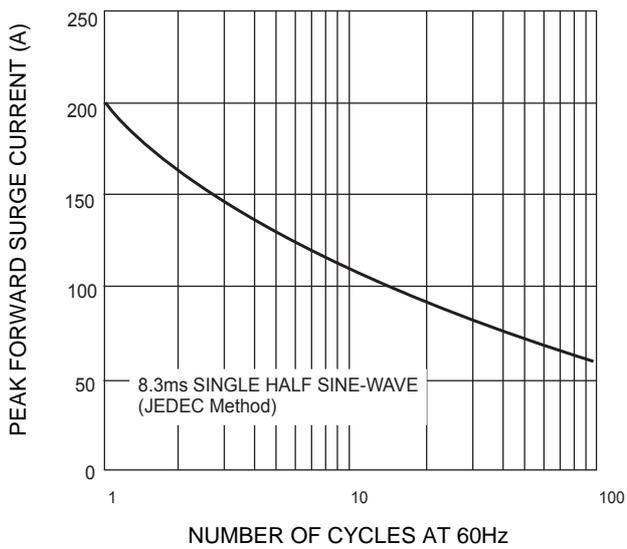


Fig. 4 TYPICAL REVERSE CHARACTERISTICS

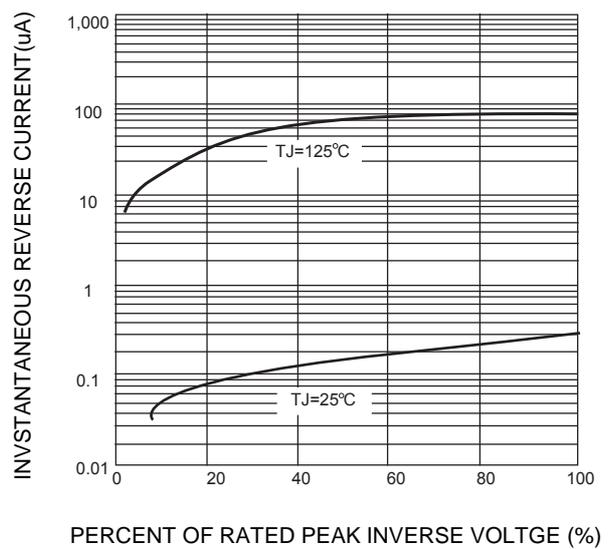
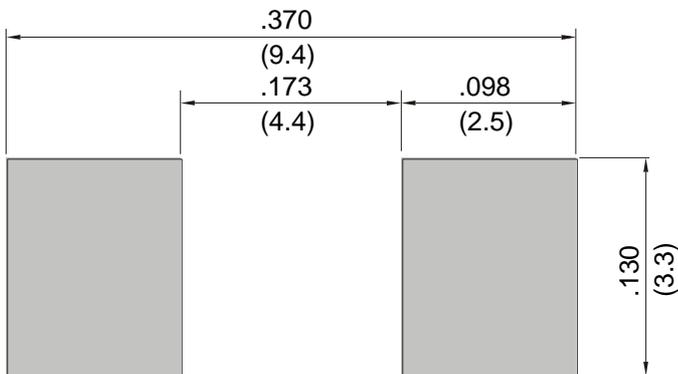


FIG.5 MOUNTING PAD LAYOUT





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