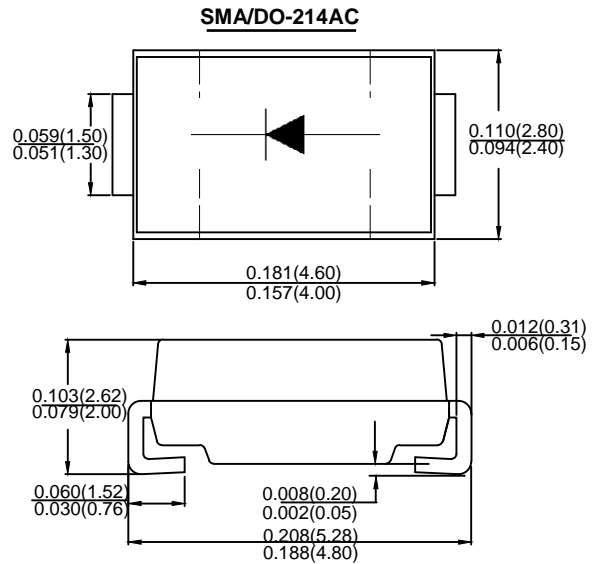


Features

- For surface mounted application
- Low forward voltage drop
- High current capability
- High reliability
- Classification Rating 94V-0

Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band dented 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	GS1AU	GS1BU	GS1DU	GS1GU	GS1JU	GS1KU	GS1MU	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 @ $T_L = 100^\circ C$	$I_{F(AV)}$	1.0							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}	35							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}	70							A
10000 times of the wave surge current (time width 1ms, time interval 3s)	I_{FSM}	24.5							A
Rating for fusing ($t < 8.3ms$)	$I^2 t$	5.39							$A^2 s$
Forward Voltage @ $I_F = 1.0A$	V_{FM}	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							
Maximum Reverse Recovery Time (Note 1)	T_{rr}	2.0							us
Typical Junction Capacitance (Note 2)	C_J	8							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	105 18							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ C$

- 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. Device mounted on FR-4 substrate, 1" x 1", 2oz, single-sided, PC boards with 0.1" x 0.15" copper pad.

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

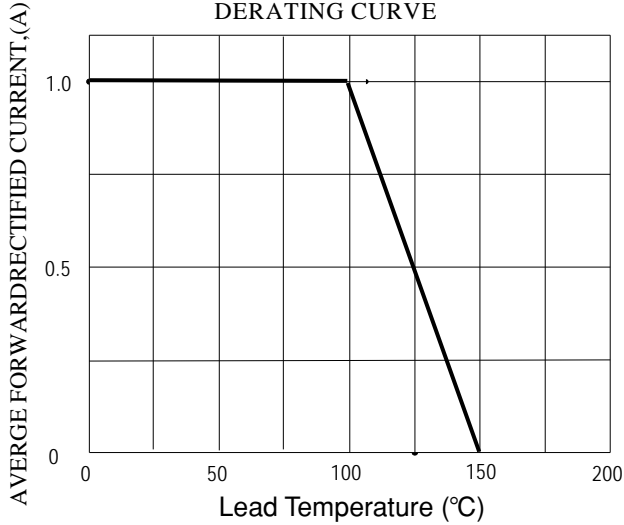


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

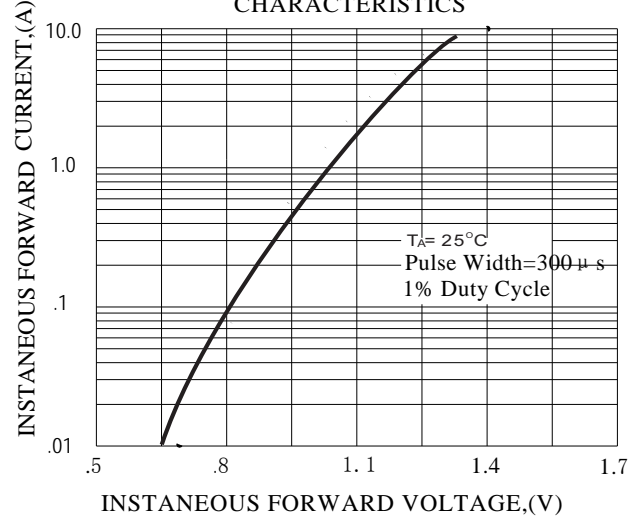


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

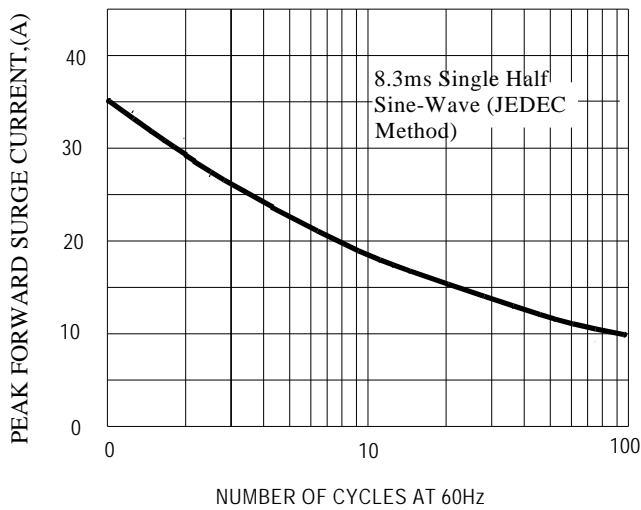
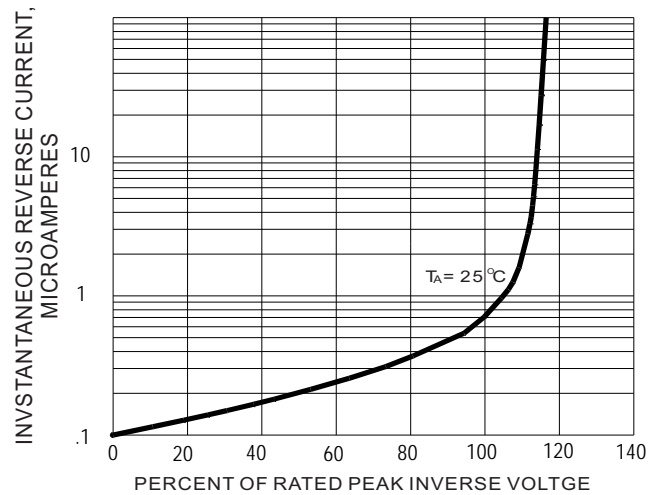
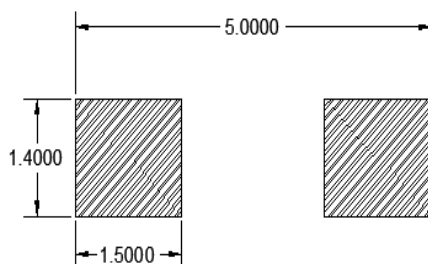


FIG.4-TYPICAL REVERSE CHARACTERISTICS



SMA PAD LAYOUT



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