

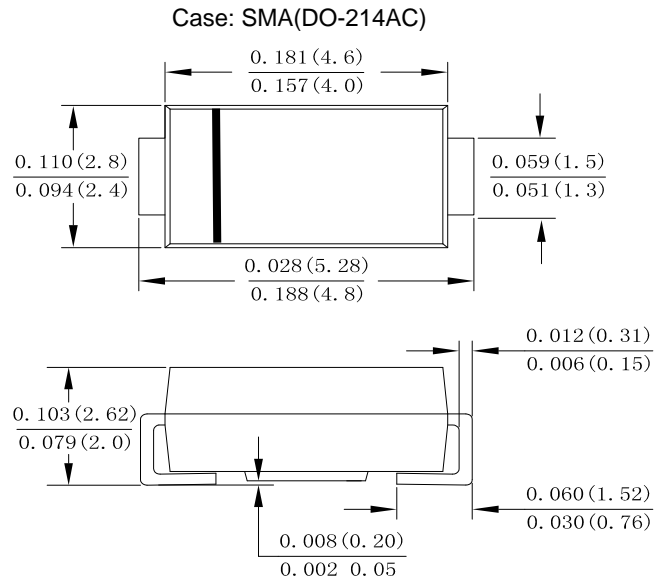


Features

- Glass Passivated Die Construction
- Low forward voltage drop
- High current capability
- High reliability
- Metalsilicon junction, majority carrier conduction
- Plastic Case Material has UL Flammability 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 (Note 1)	SYMBOL	GS1VU	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	2000	V
Maximum RMS Voltage	V_{RMS}	1400	V
Maximum DC Blocking Voltage	V_{DC}	2000	V
Average Rectified Output Current @ $T_L = 100^\circ C$	$I_{F(AV)}$	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 @ $I_F = 1.0A$	V_{FM}	1.2	V
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	5.0	μA
At Rated DC Blocking Voltage @ $T_A = 125^\circ C$		50	
I^2t Rating for fusing ($t < 8.3ms$)	I^2t	5.08	A^2s
Typical Junction Capacitance (Note 2)	C_J	5.5	pF
Typical Thermal Resistance Junction to Ambient (Note 3)	$R_{\theta JA}$	110	$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150	$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ C$

Note:

1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
2. Device mounted on FR-4 substrate, 1"*1", 2oz, single-sided, PC boards with 0.1"*0.15" copper pad.

FIG.1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

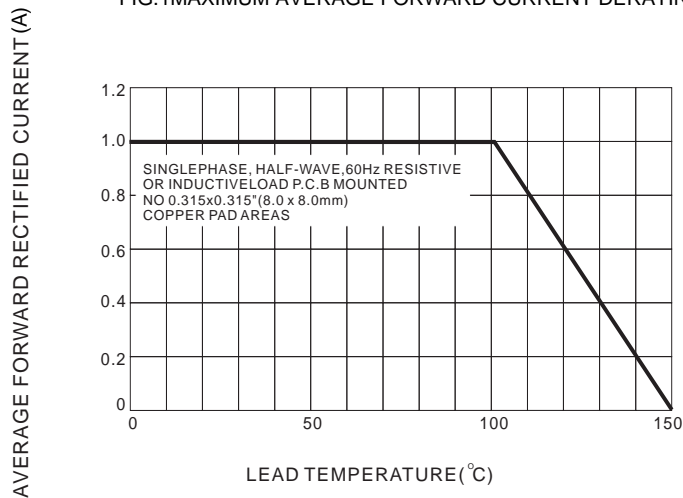


FIG.2-TYPICAL FORWARD CHARACTERISTICS

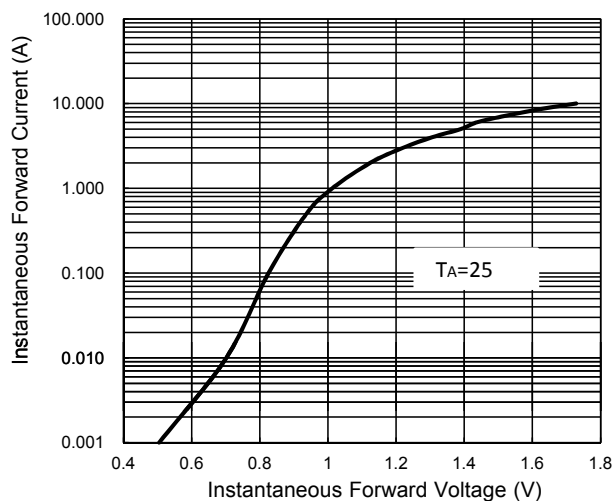


FIG.3 MAXIMUM NON-REPEITIVE SURGE CURRENT

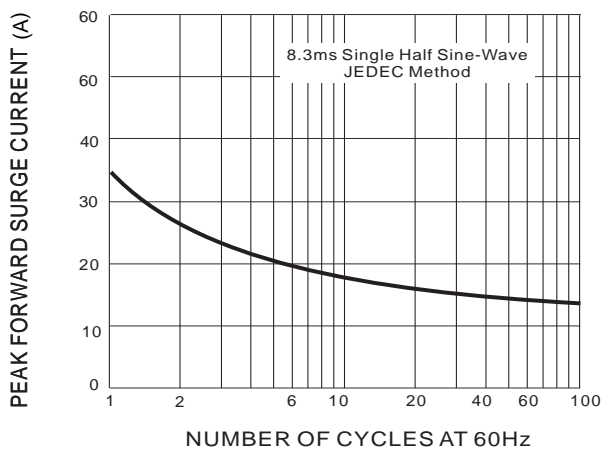


Fig. 4 Typical Reverse Characteristics (per element)

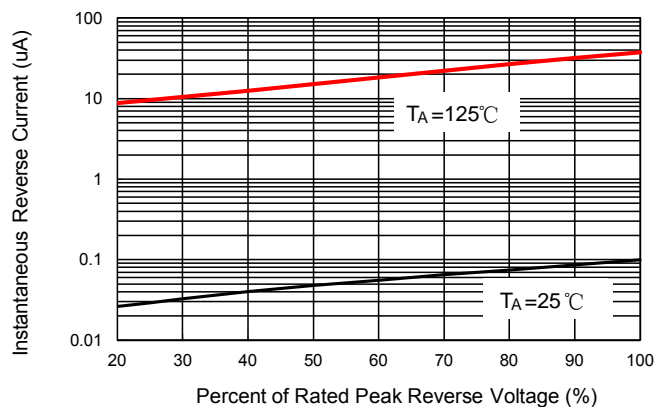


FIG.5 MOUNTING PAD LAYOUT

