

SURFACE MOUNT RECTIFIER

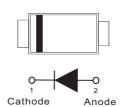
VOLTAGE 50 to 1200 Volt CURRENT 1 Ampere

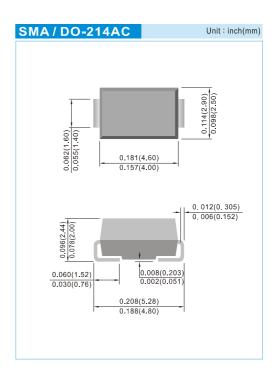
FEATURES

- For surface mounted applications in order to optimize board space
- · Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Low Forward Drop
- High temperature soldering : 260°C /10 seconds at terminals
- Glass Passivated Chip Junction
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.002 ounces, 0.067 grams





MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

PARAMETER		SYMBOL	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	GS1N	UNITS
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	1200	V
Maximum RMS Voltage		V _{RMS}	35	70	140	280	420	560	700	840	V
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	800	1000	1200	V
Maximum Average Forward Currenth at T _L =100°C		I _{F(AV)}	1								А
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	35							А	
Maximum Forward Voltage at 1A		V _F	1.1							V	
Maximum DC Reverse Current at Rated DC Blocking T Voltage T	「 _J =25°C 「 _J =125°C	I _R	1 50						μΑ		
Typical Junction Capacitance (Note 1)		C	12							pF	
	(Note 2) (Note 3)	$R_{_{\theta JA}}$	37 150					°C / W			
Operating and Storage Temperature Range		T_J,T_STG	-55 to +150								°C

NOTES:1. Measured at 1 MHz and applied $V_{\textrm{R}}$ = 4 volts.

- 2. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area
- 3. Mounted on a FR4 PCB, single-sided copper, mini pad.



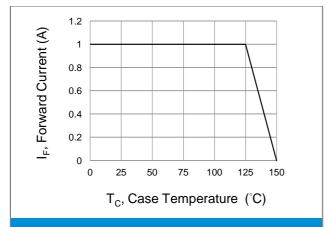


Fig.1 Forward Current Derating Curve

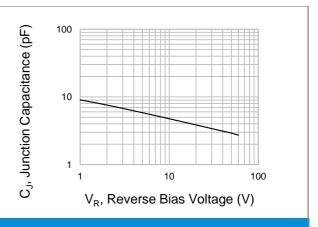


Fig.2 Typical Junction Capacitance

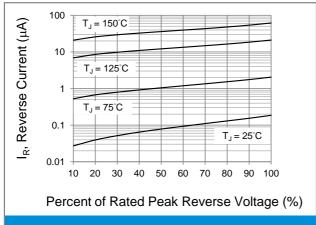


Fig.3 Typical Reverse Characteristics

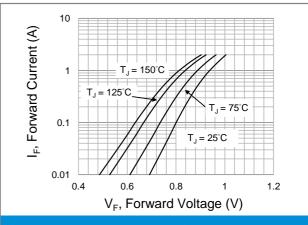
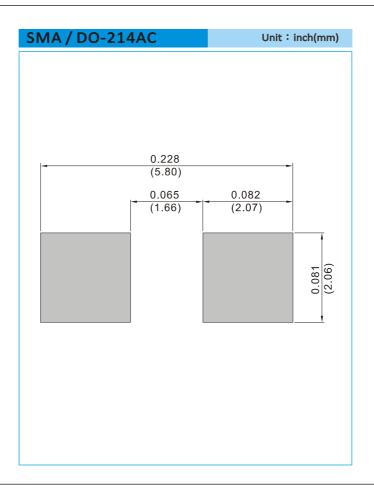


Fig.4 Typical Forward Characteristics



MOUNTING PAD LAYOUT



ORDER INFORMATION

• Packing information

T/R - 7.5K per 13" plastic Reel

T/R - 1.8K per 7" plastic Reel



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