

GS3AA - GS3MA

SURFACE MOUNT SILICON RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V CURRENT: 3.0 A

Features

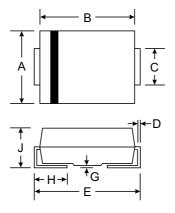
- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)







SMA(DO-214AC)									
	, ,								
Dim	Min	Max							
Α	2.29	2.92							
В	4.00	4.60							
C	1.27	1.63							
D	0.15	0.31							
E	4.80	5.59							
G	0.10	0.20							
Н	0.76	1.52							
J	2.01	2.62							
All Dimensions in mm									

Maximum Ratings and Electrical Characteristics TA = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic		Symbol	GS3AA	GS3BA	GS3DA	GS3GA	GS3JA	GS3KA	GS3MA	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		VRRM VRWM VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage		VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _L = 75°C		lo	3.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	100							А
Forward Voltage	@I _F = 3.0A	VFM				1.20				V
Peak Reverse Current At Rated DC Blocking Voltage	@T _A = 25°C @T _A = 125°C	İRM				5.0 250				μΑ
Reverse Recovery Time (Note 1)		trr	2.5							μS
Typical Junction Capacitance (Note 2)		Cj	60							pF
Typical Thermal Resistance (Note 3)		$R_{ heta}JL$	13							°C/W
Operating and Storage Temperature Range		Тj, Tsтg	-65 to +150							°C

Note: 1. Measured with $I_F = 0.5A$, $I_R = 1.0A$, $I_{rr} = 0.25A$,

- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
- 3. Mounted on P.C. Board with 8.0mm² land area.



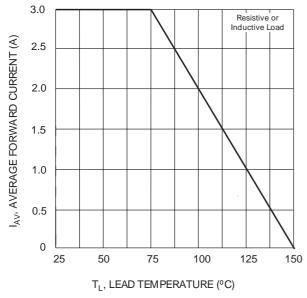


Fig. 1 Forward Current Derating Curve

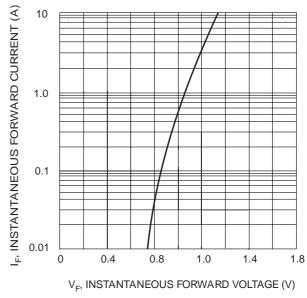
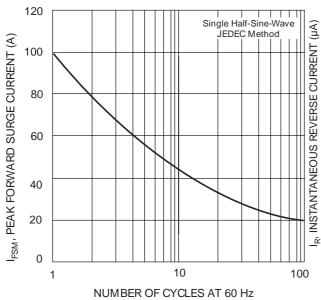


Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Forward Surge Current Derating Curve

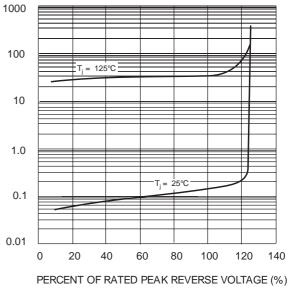


Fig. 4 Typical Reverse Characteristics