

Technical Data Data Sheet N0553, Rev. A Green Products

GS1A THRU GS1M 1.0A SURFACE MOUNT GLASS PASSIVATED RECTIFIER

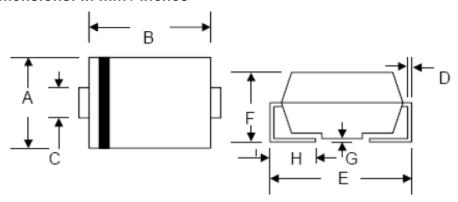
Features:

- 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-0
- This is a Pb Free device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Data:

- Case: Molded plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode band or cathode Notch
- Weight: 0.064 grams (approx.)

Mechanical Dimensions: In mm / Inches



	SMA/DO-214AC							
Dim.	Min.	Max.	Min.	Max.				
Α	2.18	2.90	90 0.086 0.					
В	3.99	4.60	0.157	0.181				
С	1.29	1.70	0.508	0.067				
D	0.152	0.305	0.006	0.012				
E	4.70	5.31	0.185	0.209				
F	1.70	2.50	0.067	0.098				
G	0.051	0.203	0.002	0.008				
Н	0.76	1.55	0.030	0.610				
	In mm		In inch					

SMA

- China Germany Korea Singapore United States
 - http://www.smc-diodes.com sales@ smc-diodes.com •





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Marking Diagram:



First row: Part Number (GS1A, GS1B, GS1D, GS1G, GS1J, GS1K, GS1M)

Second row: YYWWL

YY is the manufacture year, WW is the manufacture week code, L is the wafer's Lot Number

Ordering Information

Device	Package	Shipping			
GS1A					
GS1B					
GS1D	SMA (Pb-Free)				
GS1G		5000pcs / reel			
GS1J		·			
GS1K					
GS1M					

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.





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Maximum Ratings and Electrical characteristics @T_A = 25°C unless otherwise specified

Characteristic	Symbol	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$egin{array}{c} V_{RRM} \ V_{RWM} \ V_{R} \end{array}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _L = 100°C	Io	1.0						Α	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30					Α		
Forward Voltage $@I_F = 1.0 \text{ A}$	V _F	1.10					V		
Peak Reverse Current	I _{RM}	5.0 200						μΑ	
Reverse Recovery Time(Note1)	t _{rr}	2.5					μS		
Typical Junction Capacitance(Note2)	CJ	15					pF		
Typical Thermal Resistance Junction to Lead (Note 3)	$R_{\theta JL}$	30					°C/W		
Operating Temperature Range	T _J	-65 to +175						°C	
Storage Temperature Range	T _{STG}	-65 to +175					°C		

Note: 1. Measured with I_F = 0.5A, I_R =1.0A, I_T =0.25A.

Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 Mounted on P.C. Board with 8.0mm² copper pad areas.

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