

GSA1 thru GSA7

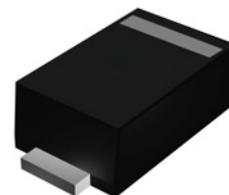
Glass Passivated General Purpose Rectifiers
 Reverse Voltage 50V to 1000V Forward Current 1A

Features

- Glass passivated standard rectifiers
- Very low profile - typical height of 1.0mm
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



RoHS
COMPLIANT



SOD-123FL

Applications

For use of general purpose rectification in lighting, cellular phone, portable device, power supplies, and other consumer applications.

Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	GSA1	GSA2	GSA3	GSA4	GSA5	GSA6	GSA7	Unit
Maximum Repetitive 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
Maximum Average Forward Rectified Current	I _{F(AV)}	1.0							A
Peak Forward Surge Current (8.3ms Single Half Sine-Wave Superimposed on Rated Load)	I _{FSM}	45							A
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	GSA1	GSA2	GSA3	GSA4	GSA5	GSA6	GSA7	Unit
Maximum Instantaneous Forward Voltage	V _F	I _F =1A	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _A =25°C	5							μA
		T _A =125°C	50							
Typical Reverse Recovery Time	t _{rr}	I _F =0.5A, I _R =1.0A	1.8							μS
		I _{rr} =0.25A								
Typical Junction Capacitance	C _J	4.0V, 1MHz	6							pF

Ratings and Characteristics Curves

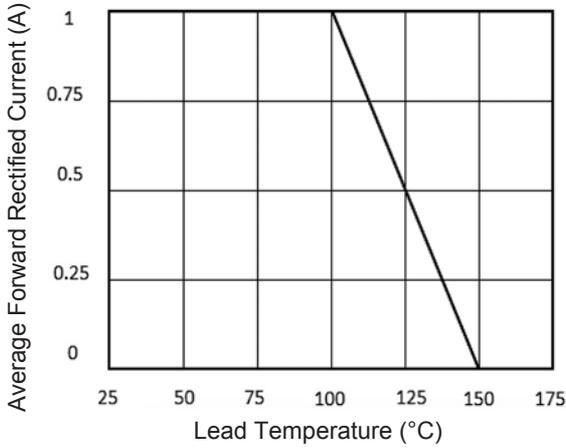


Figure 1. Forward Current Derating Curve

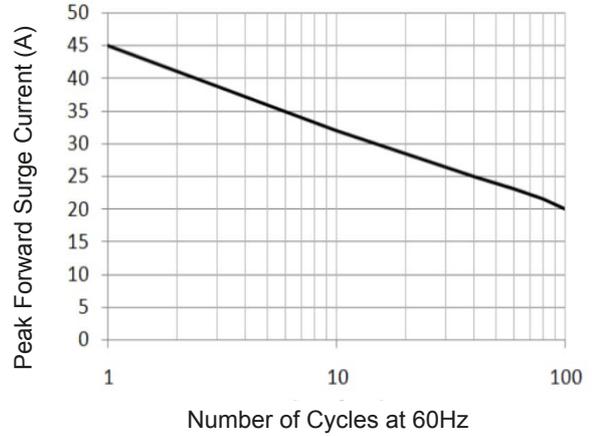


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

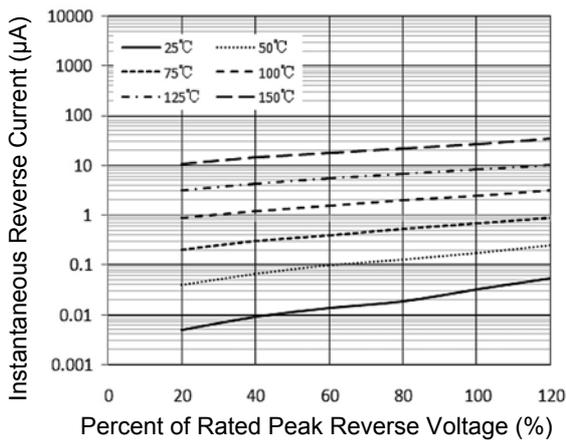


Figure 3. Typical Reverse Characteristics

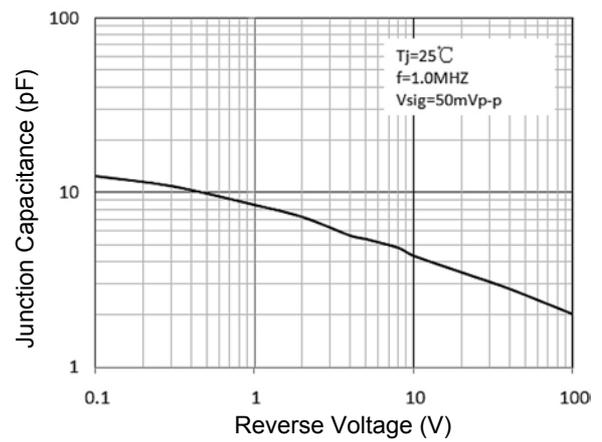


Figure 4. Typical Junction Capacitance

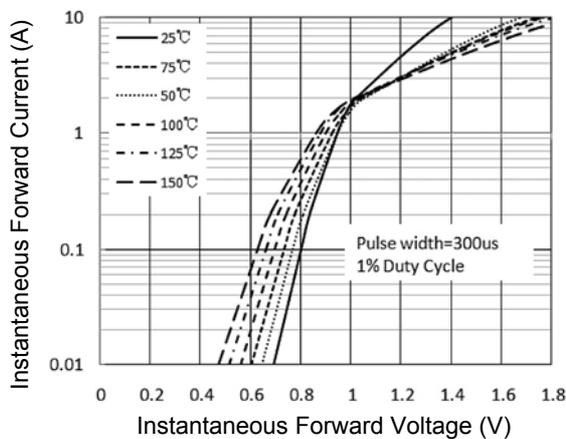
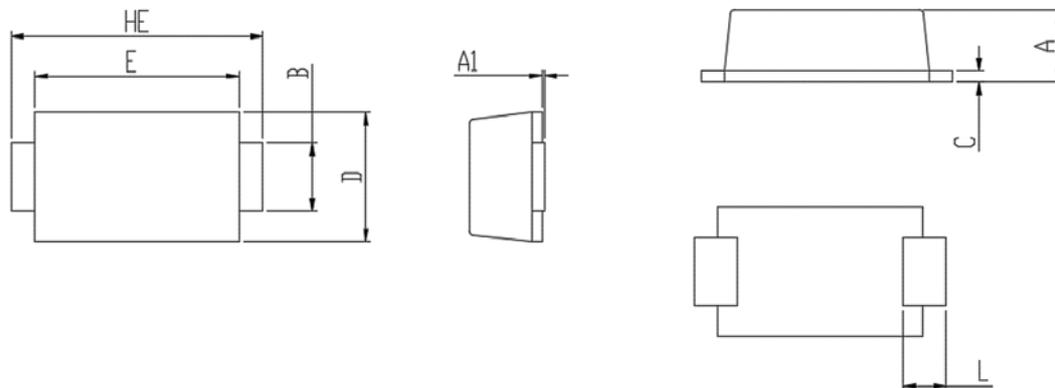


Figure 5. Typical Instantaneous Forward Characteristics

GSA1 thru GSA7

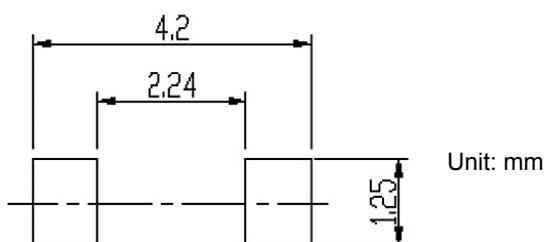
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Package Outline Dimensions (SOD-123FL)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.080	0.035	0.043
A1	0.000	0.100	0.000	0.004
B	0.850	1.050	0.033	0.041
C	0.100	0.250	0.004	0.010
D	1.700	2.000	0.067	0.079
E	2.900	3.100	0.114	0.122
L	0.430	0.830	0.017	0.033
HE	3.500	3.900	0.138	0.154

Recommended Pad Layout



Order Information

Device	Package	Marking	Carrier	Quantity
GSA1	SOD-123FL	A1	Tape & Reel	3,000 Pcs / Reel
GSA2	SOD-123FL	A2	Tape & Reel	3,000 Pcs / Reel
GSA3	SOD-123FL	A3	Tape & Reel	3,000 Pcs / Reel
GSA4	SOD-123FL	A4	Tape & Reel	3,000 Pcs / Reel
GSA5	SOD-123FL	A5	Tape & Reel	3,000 Pcs / Reel
GSA6	SOD-123FL	A6	Tape & Reel	3,000 Pcs / Reel
GSA7	SOD-123FL	A7	Tape & Reel	3,000 Pcs / Reel

For more information, please contact us at: inquiry@goodarksemi.com