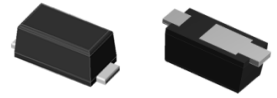


GSP21A thru GSP27A

Surface Mount Glass Passivated Standard Rectifier
 Reverse Voltage 50-1000V Forward Current 2A

Features

- Glass passivated standard rectifiers
- Low profile, typical thickness 0.8mm
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Heatsink structure
- High temperature soldering guaranteed: 260°C/10 seconds



Package: ISGA
 (SOD-123HS)



RoHS
 COMPLIANT

Absolute Maximum Ratings $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	GS P21A	GS P22A	GS P23A	GS P24A	GS P25A	GS P26A	GS P27A	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	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I_{FSM}	60							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	15							A^2sec
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150							$^\circ\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Test Conditions	Symbol	GS P21A	GS P22A	GS P23A	GS P24A	GS P25A	GS P26A	GS P27A	Unit
Minimum Breakdown Voltage	$T_A=25^\circ\text{C}, I_R=100\mu\text{A}$	V_{BR}	400				600	1000		V
Maximum Instantaneous Forward Voltage	$I_F=2\text{ A}, T_A=25^\circ\text{C}$	V_F	1.1							
	$I_F=2\text{ A}, T_A=125^\circ\text{C}$		0.9							
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	I_R	5							μA
	$T_A=125^\circ\text{C}$		50							
Typical Reverse Recovery Time	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	t_{rr}	1.5							μS
Typical Junction Capacitance	4.0 V, 1 MHz	C_J	12.4							pF
Typical Thermal Resistance ¹⁾	Juntion to Ambient	$R_{\theta JA}$	60							$^\circ\text{C/W}$
	Juntion to Lead	$R_{\theta JL}$	10							

Note:1), The thermal resistance from junction to ambient, case or lead, mounted on FR-4 P.C.B

Typical Electrical Characteristic Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

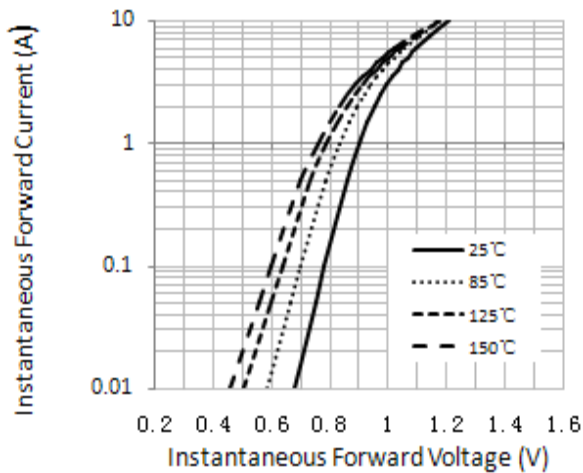


Figure 1. Forward Current Derating Curve

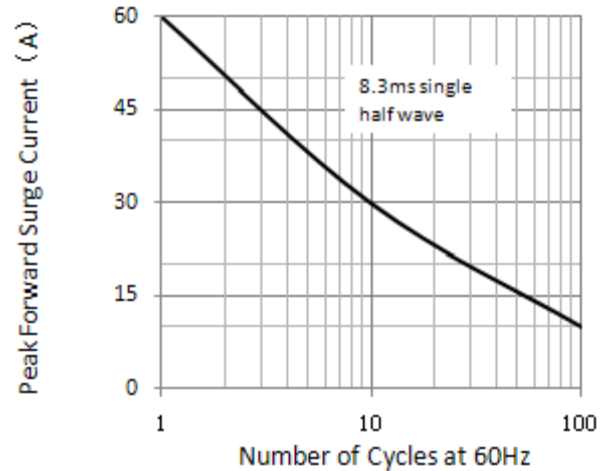


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

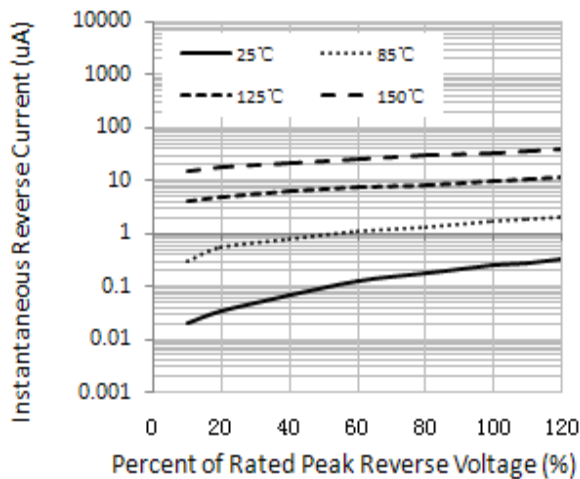


Figure 3. Typical Reverse Characteristics

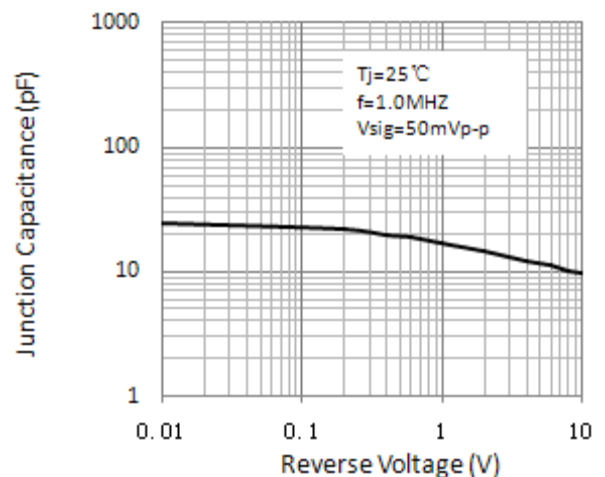


Figure 4. Typical Junction Capacitance

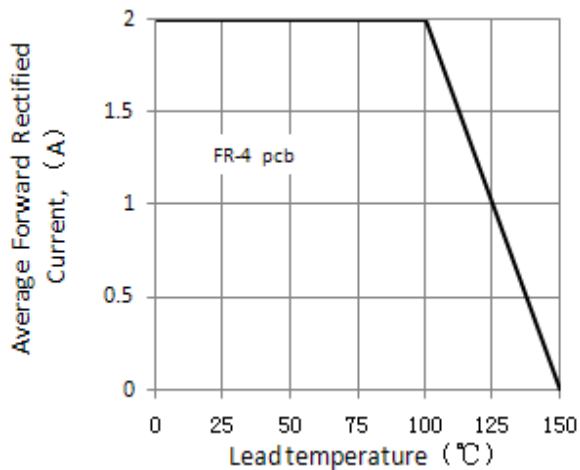
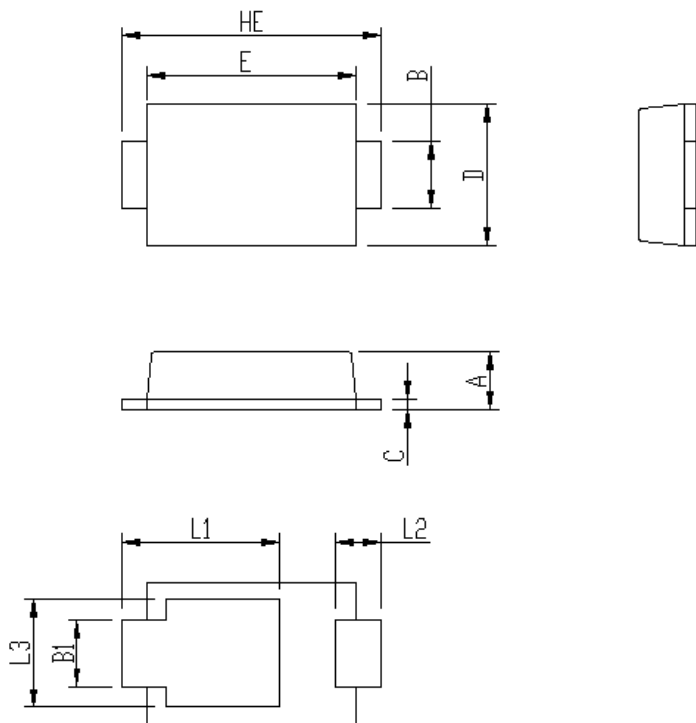


Figure 5. Typical Instantaneous Forward Characteristics

GSP21A thru GSP27A

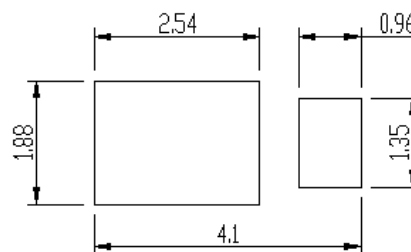
Surface Mount Glass Passivated Standard Rectifier
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Package Outline Dimensions



Package	iSGA	
Unit:mm	MIN	MAX
A	0.75	0.90
B	0.85	1.05
B1	0.85	1.05
C	0.1	0.25
D	1.9	2.1
E	2.9	3.1
L1	2.0	2.45
L2	0.4	0.85
L3	1.3	1.7
HE	3.5	3.9

Soldering footprint



Packing Information

Packing Quantities

Reel size	Quantity/reel	Quantity/inner Box	Quantity/Carton
7"	3K	30K	120K

Tape & Reel Specification

