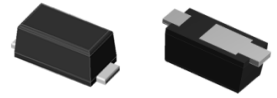


GSP21A thru GSP27A

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 ² sec
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150							°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							uA
	$T_A=125^\circ\text{C}$		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							uS
Typical Junction Capacitance	4.0 V, 1 MHz	C_J	12.4							pF
Typical Thermal Resistance ¹⁾	Juntion to Ambient	$R_{\theta JA}$	60							°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)

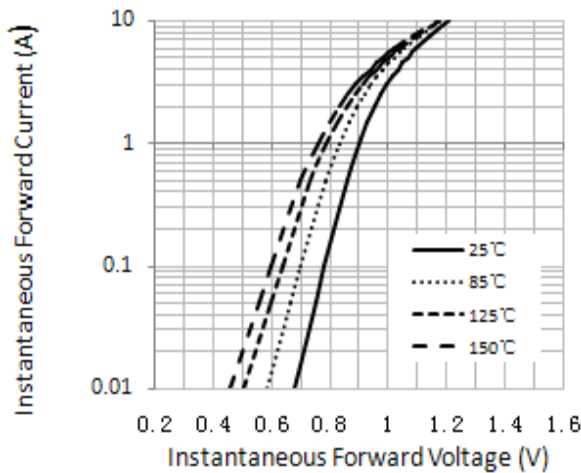


Figure 1. Forward Current Derating Curve

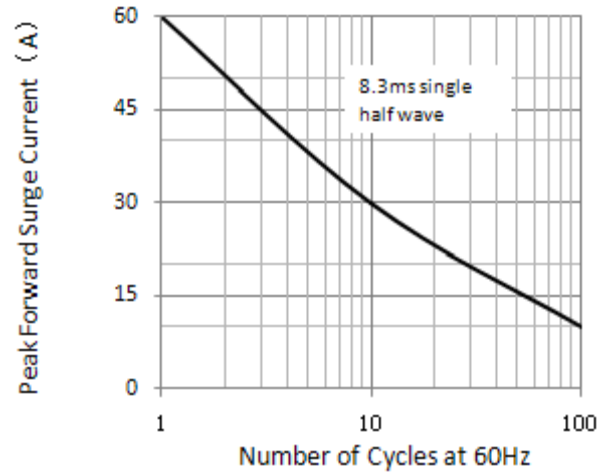


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

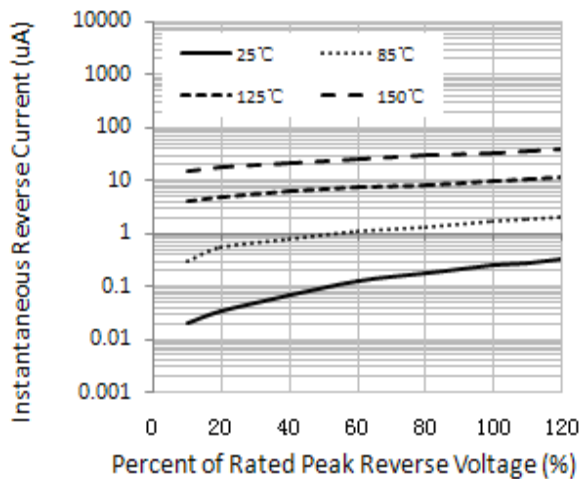


Figure 3. Typical Reverse Characteristics

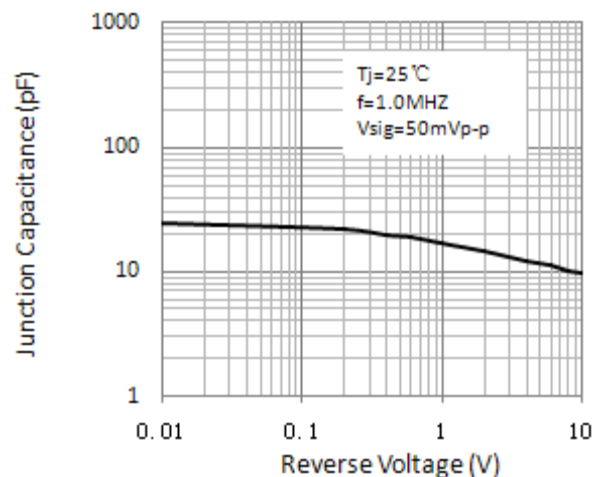


Figure 4. Typical Junction Capacitance

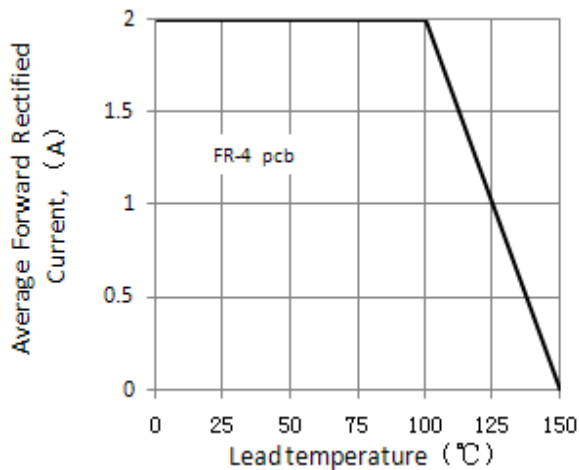
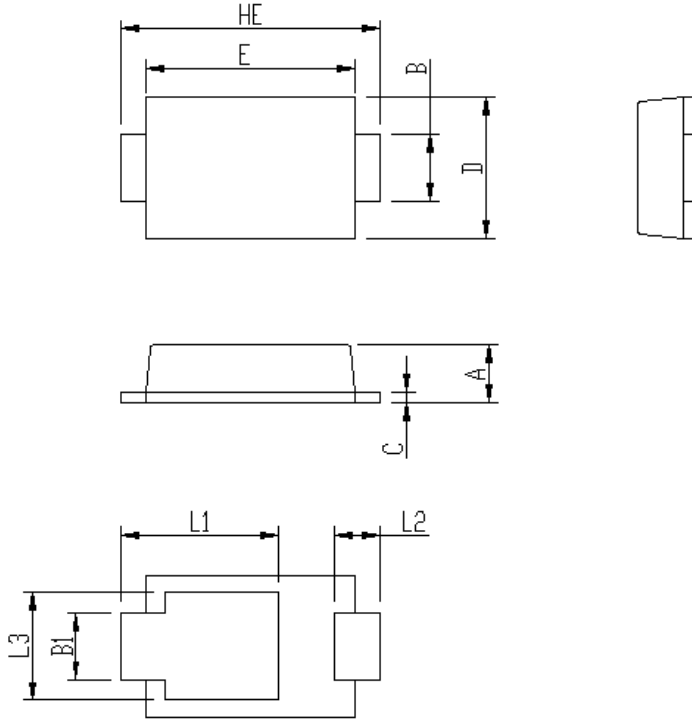


Figure 5. Typical Instantaneous Forward Characteristics

GSP21A thru GSP27A

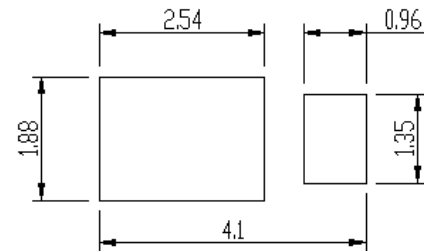
Surface Mount Glass Passivated Standard Rectifier
 Reverse Voltage 50-1000V Forward Current 2A

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

