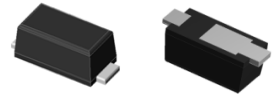


Features

- Glass passivated superfast recovery 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°C unless otherwise noted)

Parameter	Symbol	GSPU1	GSPU2	GSPU3	GSPU4	GSPU5	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current	I _{F(AV)}	1					A
Peak Forward Surge Current 8.3ms Single Half Sine- Wave Superimposed on Rated Load	I _{FSM}	30					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	Test Conditions	Symbol	GSPU1	GSPU2	GSPU3	GSPU4	GSPU5	Unit
Minimum Breakdown Voltage	T _A =25°C, I _R =100uA	V _{BR}	200			400	600	V
Maximum Instantaneous Forward Voltage	1 A	V _F	0.95			1.3	1.7	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C T _A =125°C	I _R	5.0 100					µA
Maximum Reverse Recovery Time	I _F =0.5A, I _R =1.0A, I _{tr} =0.25A	t _{rr}	35					nS
Typical Junction Capacitance	4.0 V, 1 MHz	C _J	7					pF
Typical Thermal Resistance	Juntion to Ambient	R _{θJA} ¹⁾	63					°C/W
	Juntion to Lead	R _{θJL} ¹⁾	9					
	Juntion to Case	R _{θJC} ²⁾	39					

Note: 1), The thermal resistance from junction to ambient or lead, mounted on P.C.B with 5×5mm copper pads, 2 OZ, FR4 PCB

2), The thermal resistance from junction to case, mounted on P.C.B with recommended copper pads, 2 OZ, FR4 PCB

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

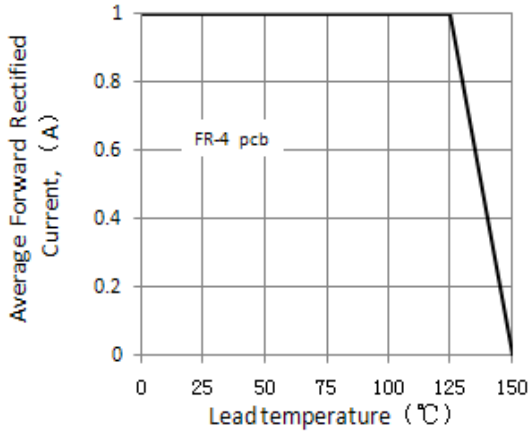


Figure 1. Forward Current Derating Curve

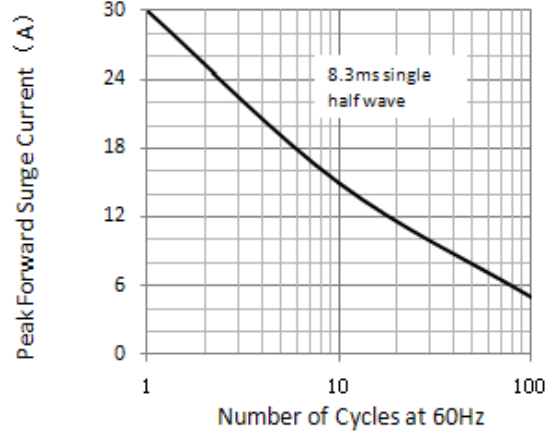


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

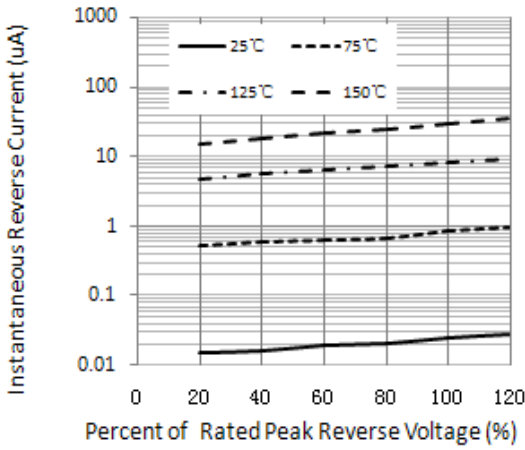


Figure 3. Typical Reverse Characteristics

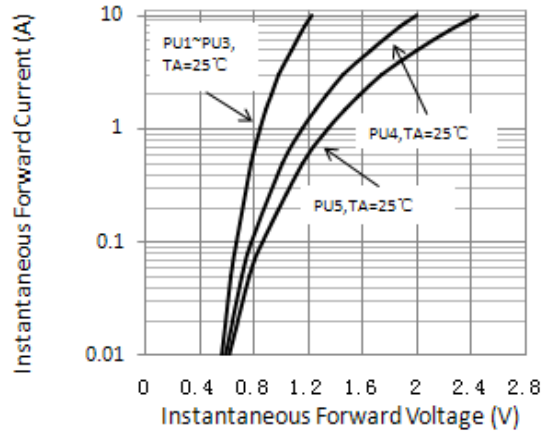


Figure 4. Typical Instantaneous Forward Characteristics

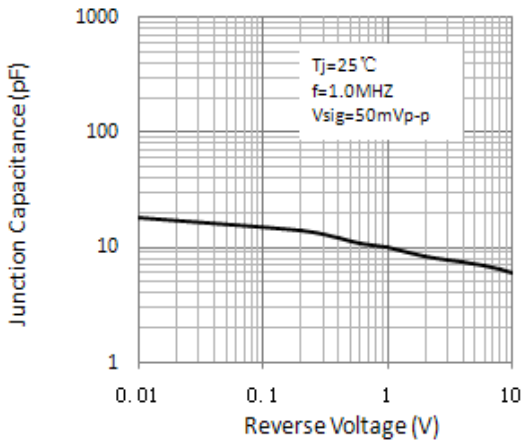


Figure 5. Typical Junction Capacitance

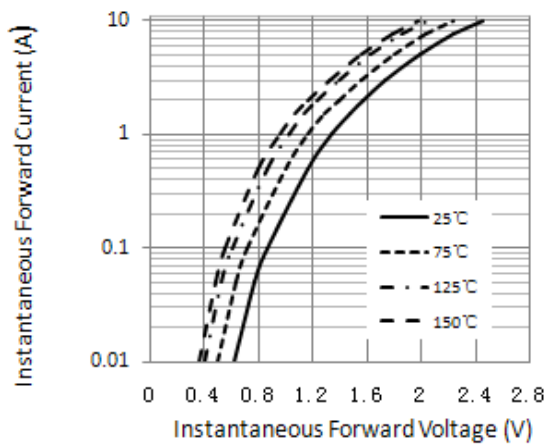
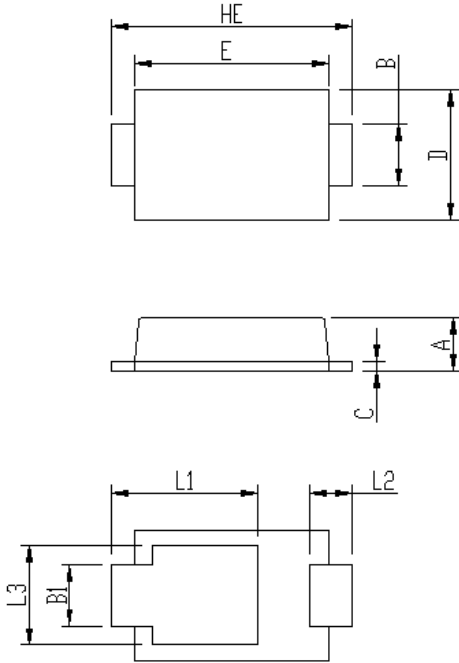


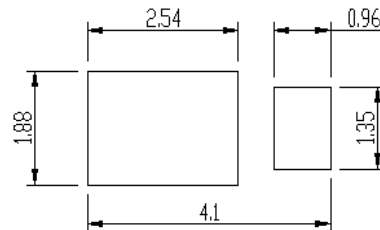
Figure 6. Typical Instantaneous Forward Characteristics (PU5)

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

