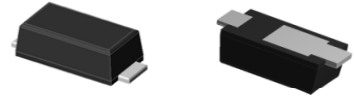


Features

- Low V_F Schottky rectifier
- Low profile, typical thickness 0.8mm
- 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	GPS2100	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC blocking voltage	V_{DC}	100	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}	50	A
Rating for fusing($t < 8.3\text{ms}$)	I^2t	10	A^2sec
Operating junction temperature range	T_J	- 55 to + 150	$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Test Conditions	Symbol	Typ.	Max.	Unit
Minimum Breakdown voltage	T _A =25°C, I _R =1mA	V _{BR}	100		V
Instantaneous forward voltage	I _F =2A, T _A =25°C	V _F	0.77	0.80	
	I _F =2A, T _A =125°C	V _F	0.62	0.65	
Instantaneous reverse current at rated DC blocking voltage	T _A =25°C	I _R	0.39	5	uA
	T _A =125°C		181	500	uA
Typical junction capacitance	4.0 V, 1 MHz	C _J	60		pF
Typical thermal resistance	junction to ambient	R _{θJA} ¹⁾	65		°C/W
	junction to lead	R _{θJL} ¹⁾	9		
	junction to case	R _{θJC} ²⁾	35		

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)

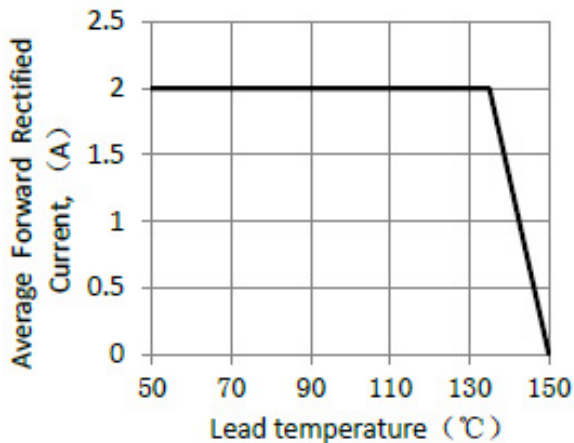


Figure 1. Forward Current Derating Curve

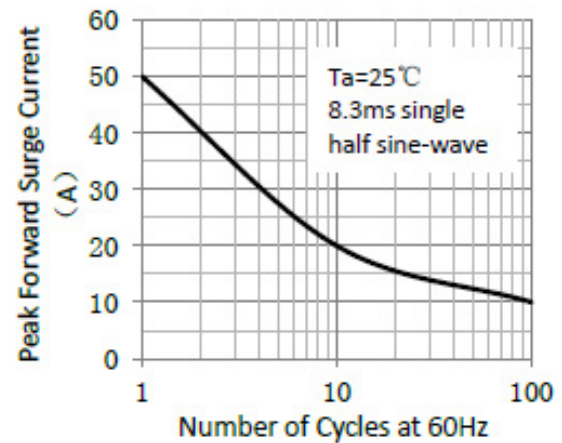


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

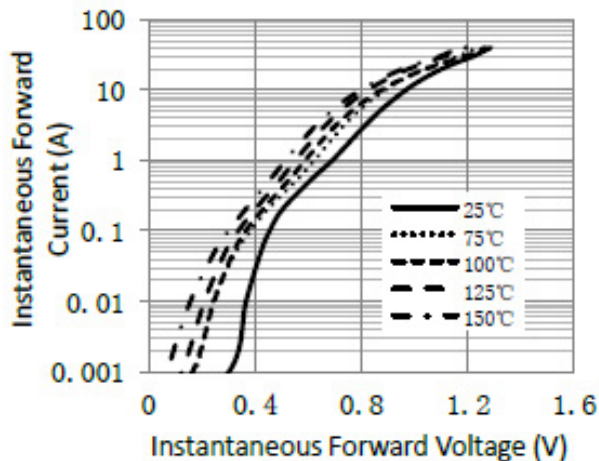


Figure 3. Typical Instantaneous Forward Characteristics

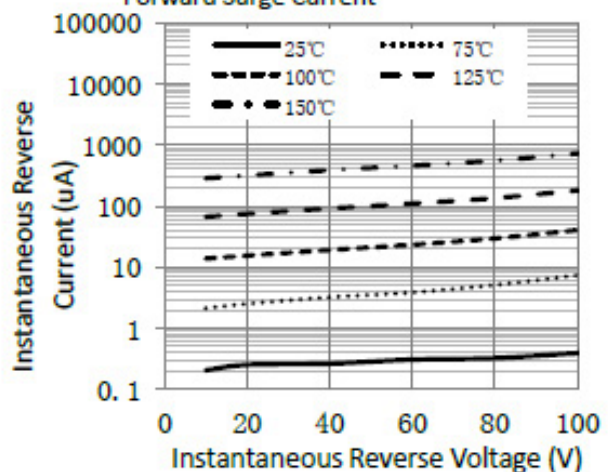


Figure 4. Typical Reverse Characteristics

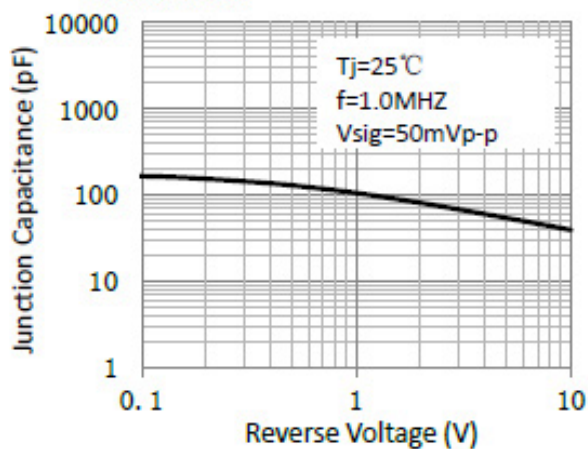
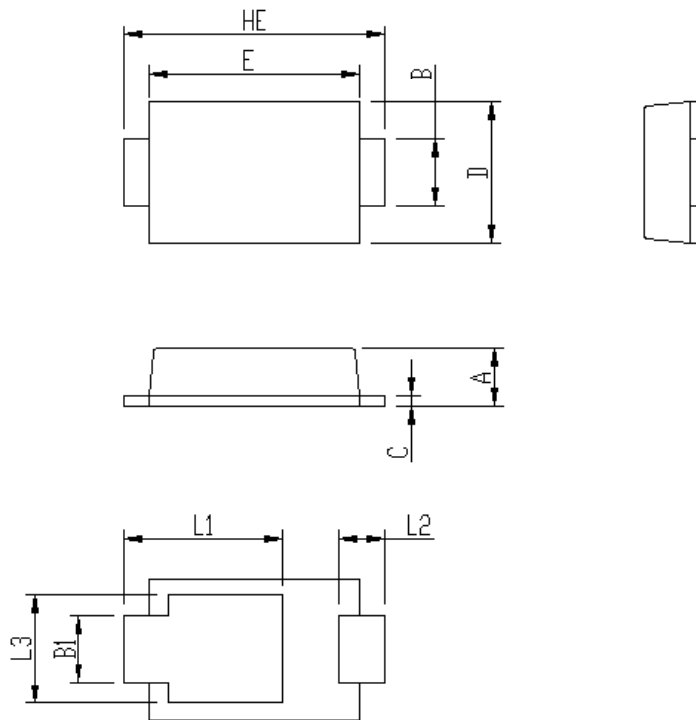


Figure 5. Typical Junction Capacitance

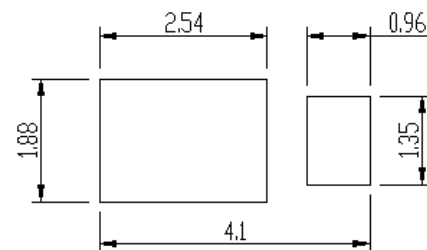
Package Outline Dimensions

iSGA(SOD-123HS)



Package	iSGA(SOD-123HS)	
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



Package Information

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

Tape & Reel Specification

