

Features

- Low V_F Schottky rectifier
- 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)



Applications

For use of fast switching in RF module, lighting, cell phone, portable device, power supplies and other consumer applications.

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

Parameter	Symbol	GSPS1B5H	GSPS1CH	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	200	V
Maximum RMS Voltage	V_{RMS}	105	140	V
Maximum DC Blocking Voltage	V_{DC}	150	200	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}	40		A
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	Value	Unit
Maximum Instantaneous Forward Voltage	$I_F=0.5\text{A}, T_A=25^\circ\text{C}$	V_F	0.80	V
	$I_F=1\text{A}, T_A=25^\circ\text{C}$		0.85	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	I_R	2.0	μA
	$T_A=125^\circ\text{C}$		200	μA
Typical Thermal Resistance ¹⁾	Junction to Ambient	$R_{\theta JA}$	110	$^\circ\text{C/W}$
	Junction to Case	$R_{\theta JC}$	25	
	Junction to Lead	$R_{\theta JL}$	15	

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

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

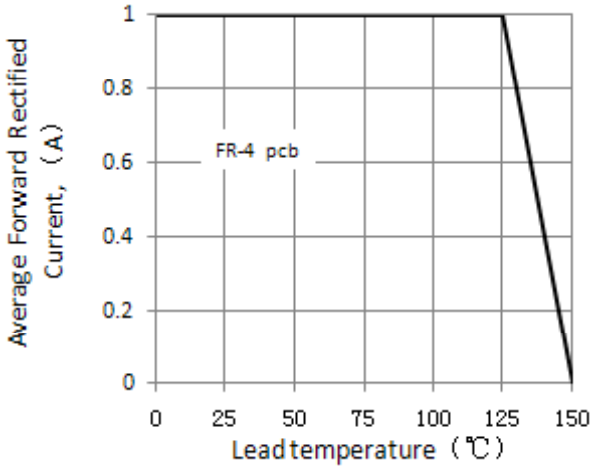


Figure 1. Forward Current Derating Curve

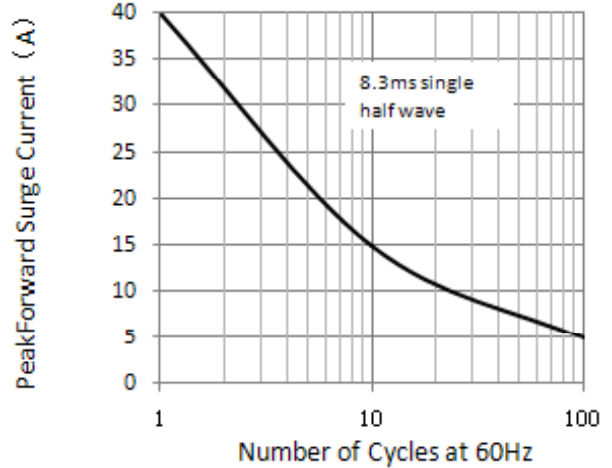


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

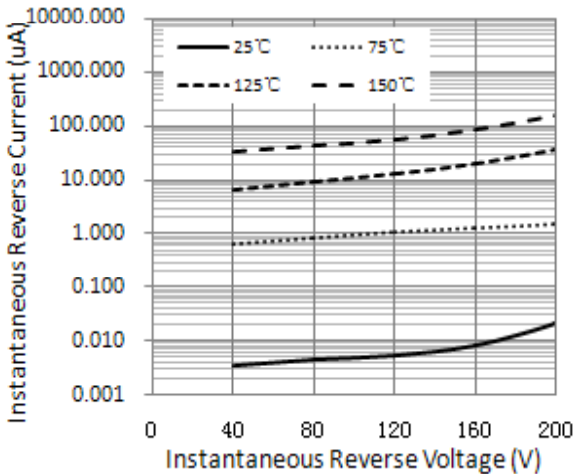


Figure 3. Typical Instantaneous Reverse Characteristics

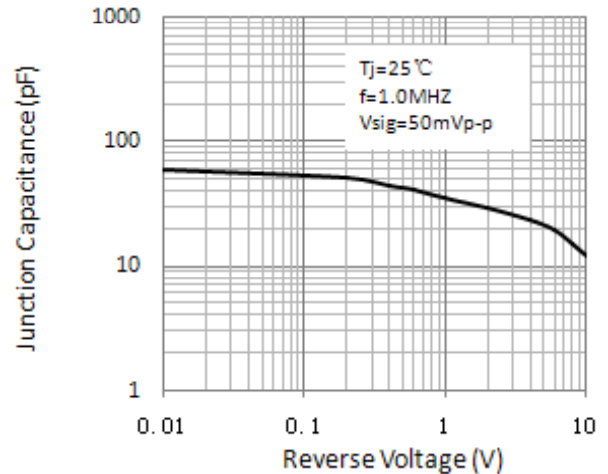


Figure 4. Typical Junction Capacitance

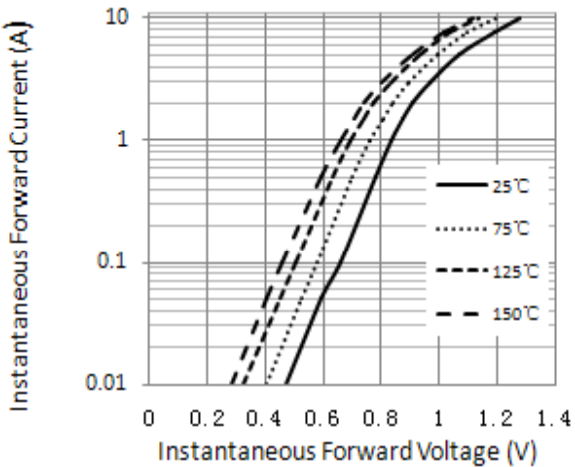
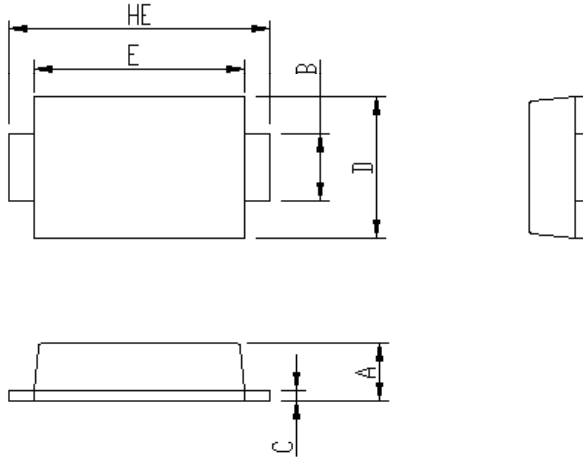


Figure 5. Typical Instantaneous Forward Characteristics

GSPS1B5H-GSPS1CH

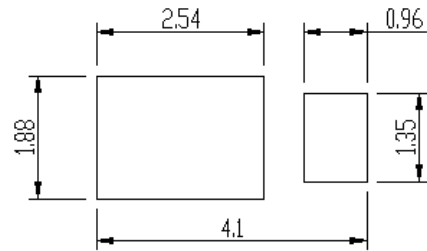
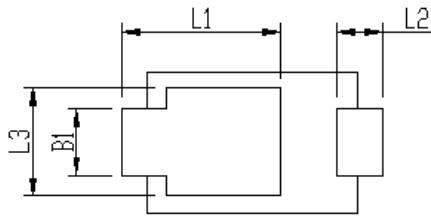
Schottky Barrier Rectifier
 Reverse Voltage 150-200 V Forward Current 1.0 A

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/Carton
7"	3K	30K	120K

Tape & Reel Specification

