

## Features

- Low forward voltage drop
- Low profile - typical height of 0.65 mm
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds



Package: iSGP  
 (SOD-323HS)



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

Parameter	Symbol	Values	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	42	V
Maximum DC Blocking Voltage	$V_{DC}$	60	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	$I_{FSM}$	25	A
Operating Junction Temperature Range	$T_J$	-55 To +150	°C
Storage Temperature Range	$T_{STG}$	-55 To +150	°C

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

Parameter	Test Conditions	Symbol	Values	Unit
Maximum Instantaneous Forward Voltage	$I_F=1\text{A}, T_A=25^\circ\text{C}$	$V_F$	0.70	V
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	$I_R$	20	uA
Typical Junction Capacitance	4.0V, 1 MHz	$C_J$	44	pF
Typical Thermal Resistance <sup>1</sup>	Junction to Ambient	$R_{\theta JA}$	89	°C/W
	Junction to Lead	$R_{\theta JL}$	10	

Note1: The thermal resistance from Junction to Ambient or Junction to Lead, mounted on P.C.B with 5×5mm copper pads, 2 OZ, FR4 PCB

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

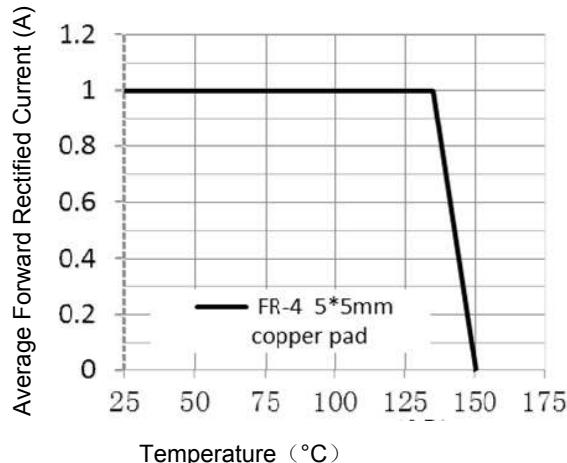


Figure 1. Forward Current Derating Curve

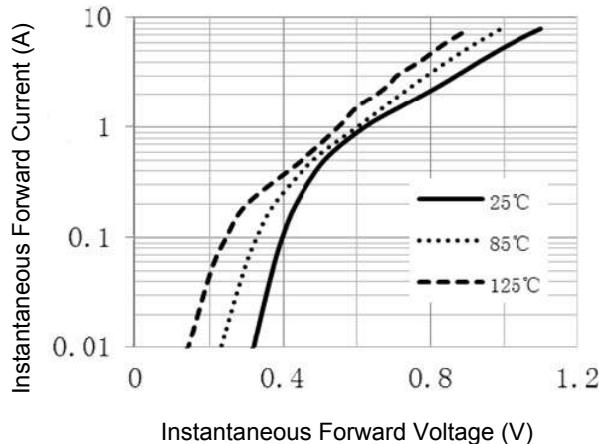


Figure 2. Typical Instantaneous Forward Characteristics

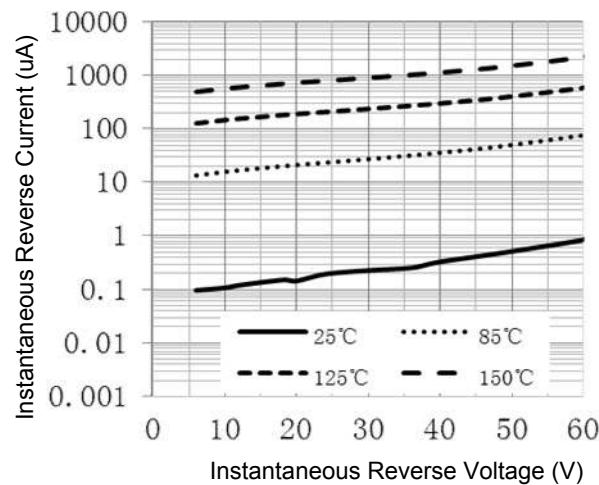


Figure 3. Typical Reverse Characteristics

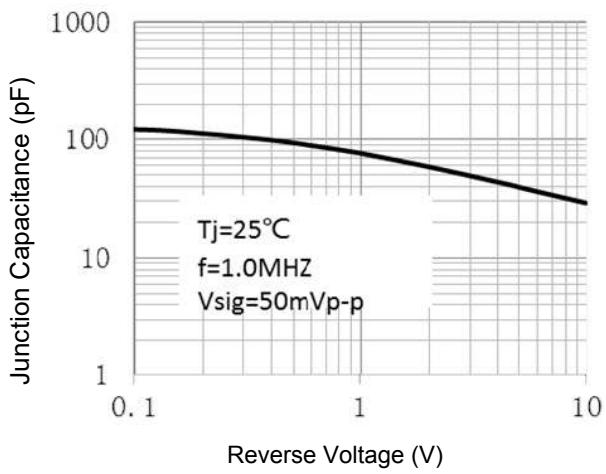


Figure 4. Typical Junction Capacitance

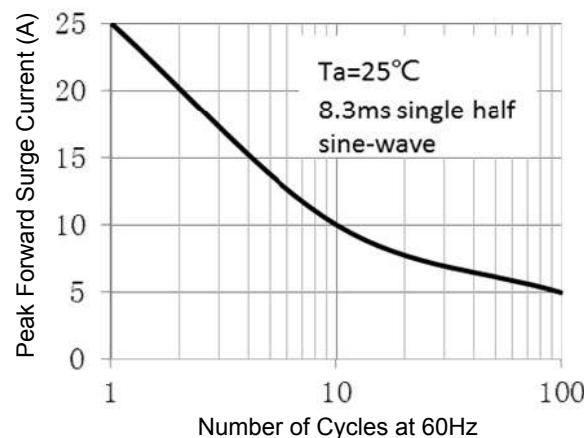
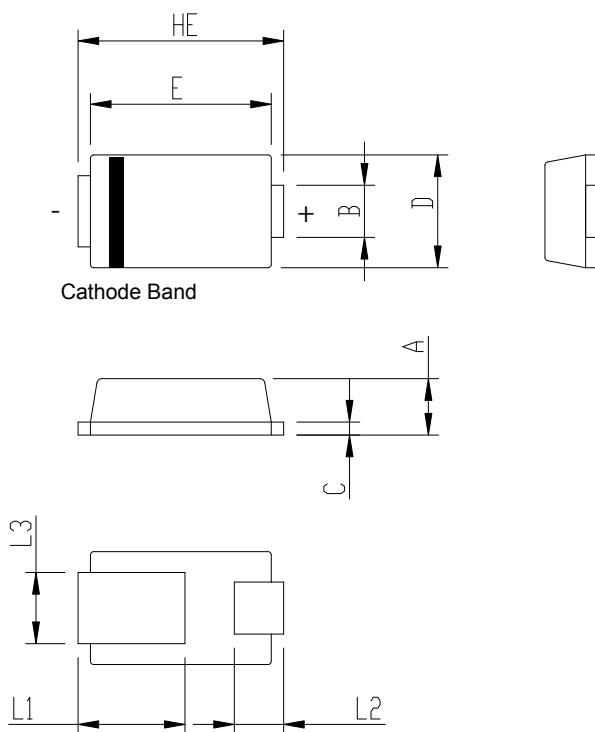


Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

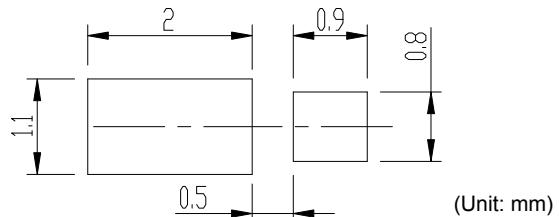
## Package Outline Dimensions

iSGP (SOD-323HS)



Package	Unit: mm	
	Min	Max
iSGP		
A	0.60	0.73
B	0.55	0.75
C	0.10	0.25
D	1.20	1.40
E	2.10	2.30
HE	2.30	2.70
L1	1.10	1.50
L2	0.40	0.75
L3	0.75	1.00

Soldering Footprint



## Tape & Reel Specification

