

Features

- Low leakage current
- Schottky barrier diode
- Low forward voltage drop
- Moisture sensitivity: level 1, per J-STD-020
- Halogen-free according to IEC 61249-2-21 definition
- High temperature soldering guaranteed: 260°C/10 seconds



RoHS
COMPLIANT



Package: iSGP
(SOD-323HS)

Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	GSTP0140S	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	40	V
Maximum RMS Voltage	V _{RMS}	28	V
Maximum DC Blocking Voltage	V _{DC}	40	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}	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°C unless otherwise noted)

Parameter	Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Instantaneous Forward Voltage	I _F =0.1A, T _A =25°C	V _F	-	0.37	0.40	V
	I _F =0.2A, T _A =25°C		-	0.39	0.42	
	I _F =0.5A, T _A =25°C		-	0.43	0.46	
	I _F =1.0A, T _A =25°C		-	0.47	0.50	
	I _F =0.5A, T _A =125°C		-	0.33	-	
	I _F =1.0A, T _A =125°C		-	0.40	0.46	
Instantaneous Reverse Current	V _R =10V, T _J =25°C	I _R	-	0.22	-	uA
	V _R =20V, T _J =25°C		-	0.43	20	
	V _R =30V, T _J =25°C		-	0.80	20	
	V _R =40V, T _J =25°C		-	2	20	
	V _R =40V, T _J =125°C		-	1.2	-	mA
Typical Junction Capacitance	4.0V, 1 MHz	C _J	54			pF
Typical Thermal Resistance ¹	Junction to Ambient	R _{θJA}	103			°C/W
	Junction to Lead	R _{θJL}	24			

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)

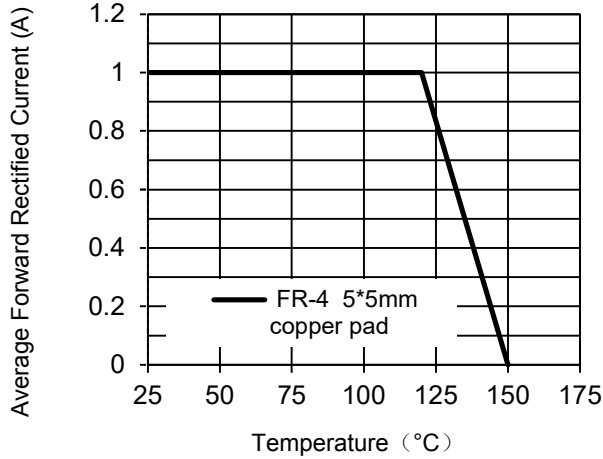


Figure 1. Forward Current Derating Curve

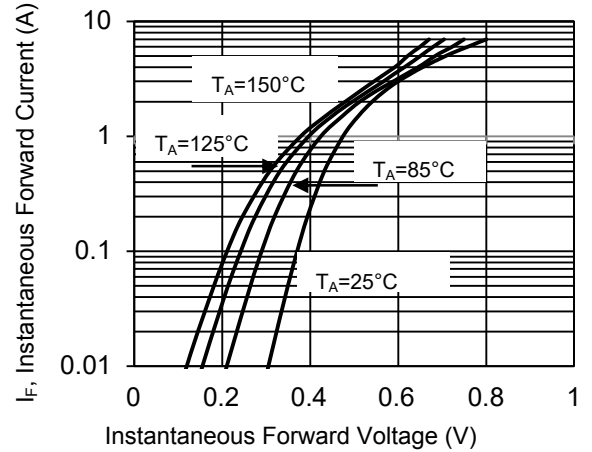


Figure 2. Typical Instantaneous Forward Characteristics

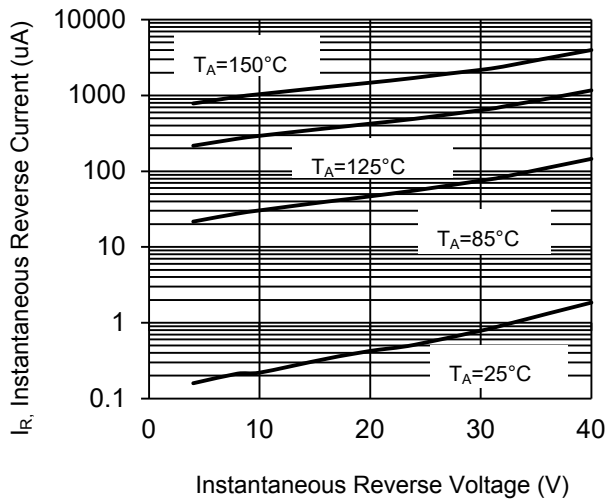


Figure 3. Typical Reverse Characteristics

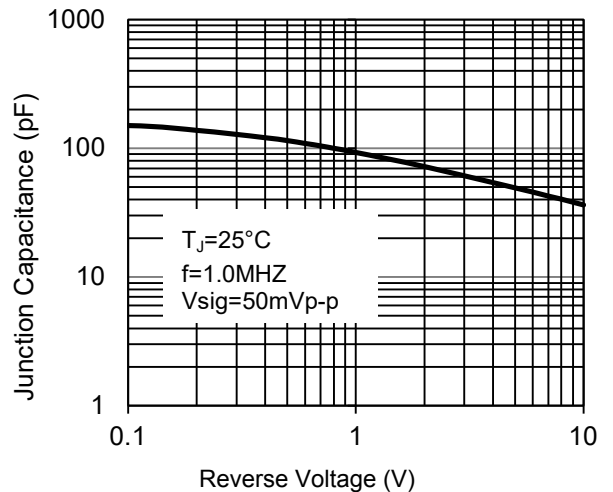


Figure 4. Typical Junction Capacitance

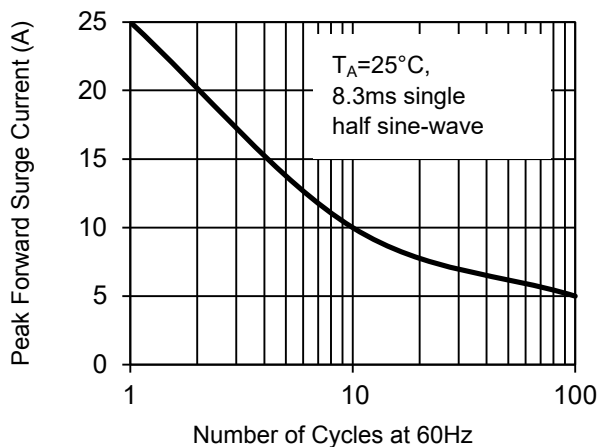
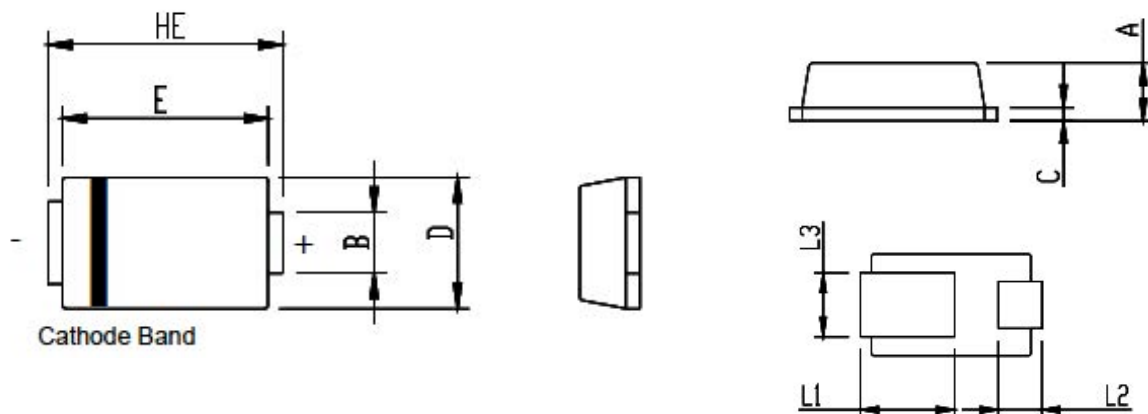


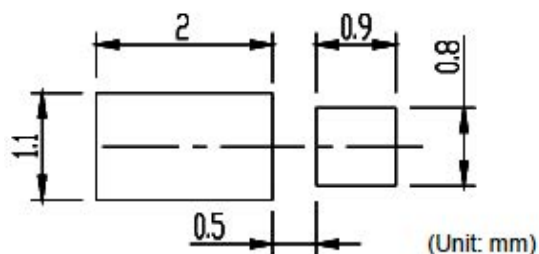
Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

Package Outline Dimensions iSGP (SOD-323HS)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.600	0.730	0.024	0.029
B	0.550	0.750	0.022	0.030
C	0.100	0.250	0.004	0.010
D	1.200	1.400	0.047	0.055
E	2.100	2.300	0.083	0.091
HE	2.300	2.700	0.091	0.106
L1	1.100	1.500	0.043	0.059
L2	0.400	0.750	0.016	0.030
L3	0.750	1.000	0.030	0.039

Recommended Pad Layout



Order information

Device	Package	Marking	Carrier	Quantity
GSTP0140S	iSGP (SOD-323HS)	14S	Tape & Reel	4,500 pcs / Reel

For more information, please contact us at: inquiry@goodarksemi.com