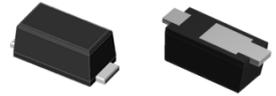


GSPS17 thru GSPS1100

Surface Mount Schottky Rectifier
 Reverse Voltage 70-100V Forward Current 1.0A

Features

- Super Low VF Schottky barrier diodes
- 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	GSPS17	GSPS18	GSPS19	GSPS1100	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	70	80	90	100	V
Maximum RMS Voltage	V _{RMS}	49	56	63	70	V
Maximum DC Blocking Voltage	V _{DC}	70	80	90	100	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}	30				A
Rating For Fusing (t<8.3ms)	I ² t	3.8				A ² sec
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	Value	Unit
Minimum Breakdown Voltage	T _A =25°C, I _R =1mA	V _{BR}	100	V
Maximum Instantaneous Forward Voltage	I _F =1A T _A =25°C	V _F	0.80	
	I _F =1A T _A =125°C		0.65	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	1.0	uA
	T _A =125°C		150	
Typical Junction Capacitance	4.0V, 1 MHz	C _J	28	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

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Surface Mount Schottky Rectifier
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Typical Electrical and Thermal Characteristic Curves

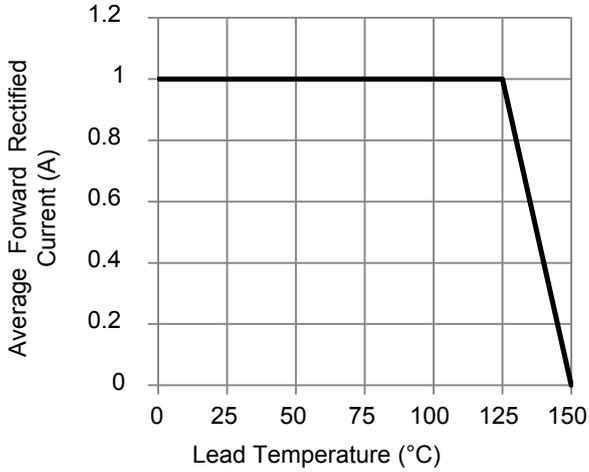


Figure 1. Forward Current Derating Curve

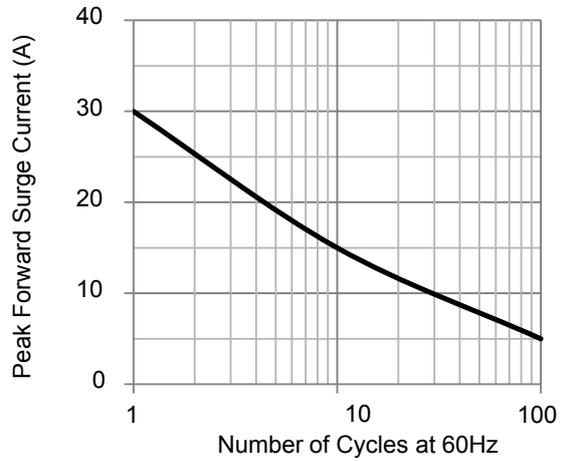


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

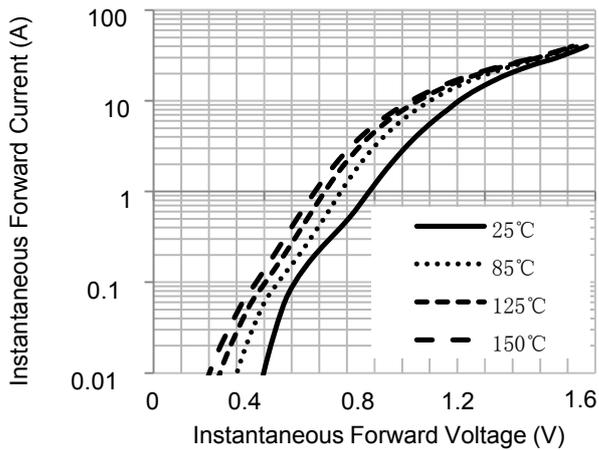


Figure 3. Typical Instantaneous Forward Characteristics

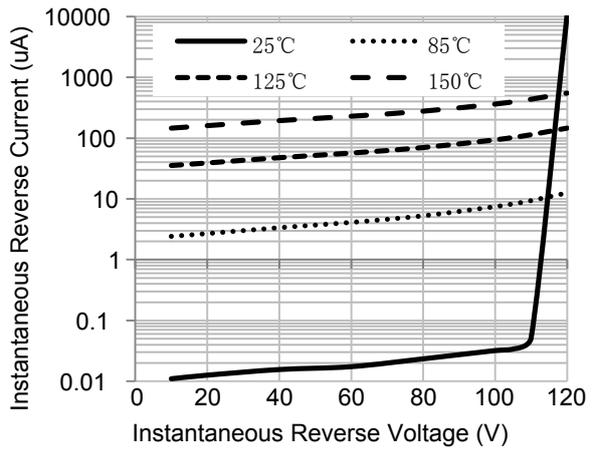


Figure 4. Typical Reverse Characteristics

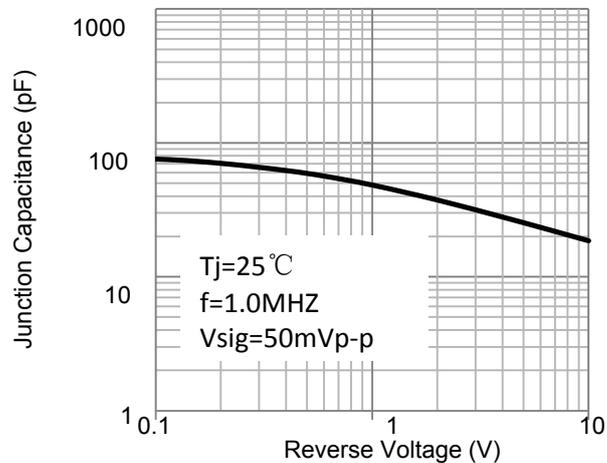
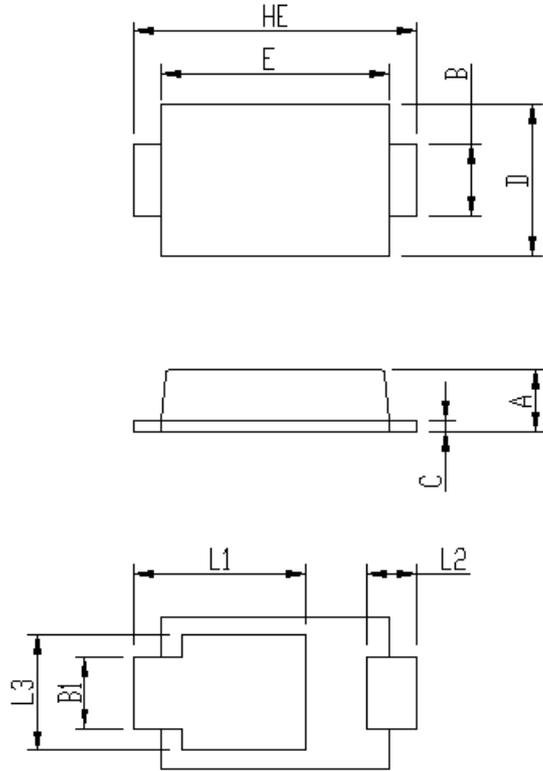


Figure 5. Typical Junction Capacitance

GSPS17 thru GSPS1100

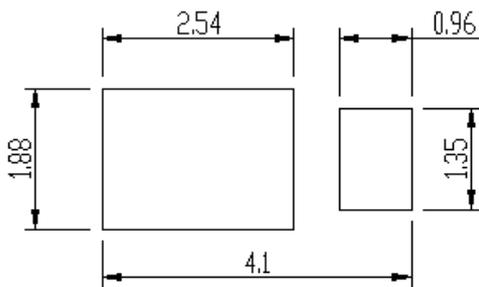
Surface Mount Schottky Rectifier
 Reverse Voltage 70-100V Forward Current 1.0A

Package Outline Dimensions iSGA (SOD-123HS)



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

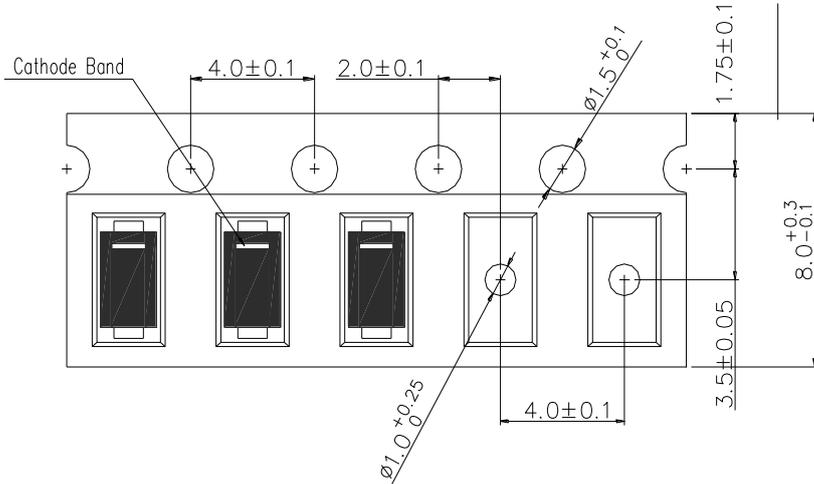
Soldering footprint Unit: mm



GSPS17 thru GSPS1100

Surface Mount Schottky Rectifier
 Reverse Voltage 70-100V Forward Current 1.0A

Tape & Reel Specification



Unit: mm

Ordering Information

Device	Package	Marking	Quantity	HSF Status
GSPS17	SOD-123HS	PS17	3,000 pcs/Reel	RoHS Compliant
GSPS18	SOD-123HS	PS18	3,000 pcs/Reel	RoHS Compliant
GSPS19	SOD-123HS	PS19	3,000 pcs/Reel	RoHS Compliant
GSPS1100	SOD-123HS	PS1100	3,000 pcs/Reel	RoHS Compliant