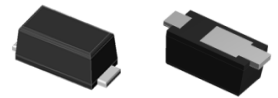


GSPS22 thru GSPS24

Surface Mount Schottky Rectifier
 Reverse Voltage 20-40V Forward Current 2A

Features

- Heatsink structure
- Low profile, typical thickness 0.8mm
- Low forward voltage drop
- Super low VF schottky barrier diodes
- Moisture sensitivity: level 1, per J-STD-020
- 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	GSPS22	GSPS23	GSPS24	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	V
Maximum RMS voltage	V _{RMS}	14	21	28	V
Maximum DC blocking voltage	V _{DC}	20	30	40	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<8.3ms)	I ² t	10			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	GSPS22	GSPS23	GSPS24	Unit
Minimum Breakdown voltage	T _A =25°C, I _R =1mA	V _{BR}	20	30	40	V
Maximum instantaneous forward voltage	I _F =2A T _A =25°C	V _F	0.51			
	I _F =2A T _A =125°C	V _F	0.45			
Maximum DC reverse current at rated DC blocking voltage	T _A =25°C	I _R	50			uA
	T _A =125°C		15			mA
Typical junction capacitance	4.0 V, 1 MHz	C _J	120			pF
Typical thermal resistance ¹⁾	junction to ambient	R _{θJA}	110			°C/W
	junction to case	R _{θJC}	20			
	junction to lead	R _{θJL}	15			

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

Typical Electrical Characteristic Curves

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

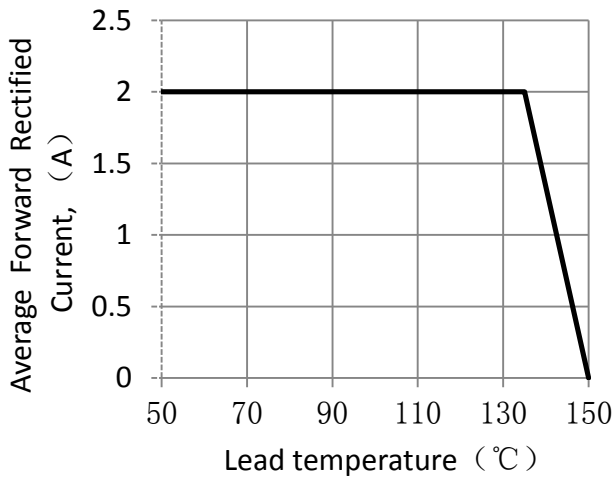


Figure 1. Forward Current Derating Curve

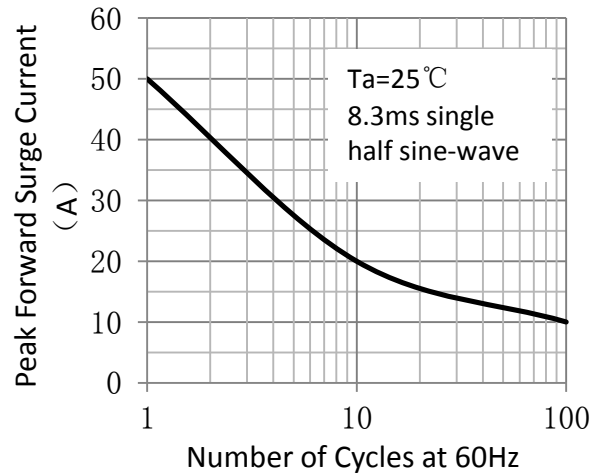


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

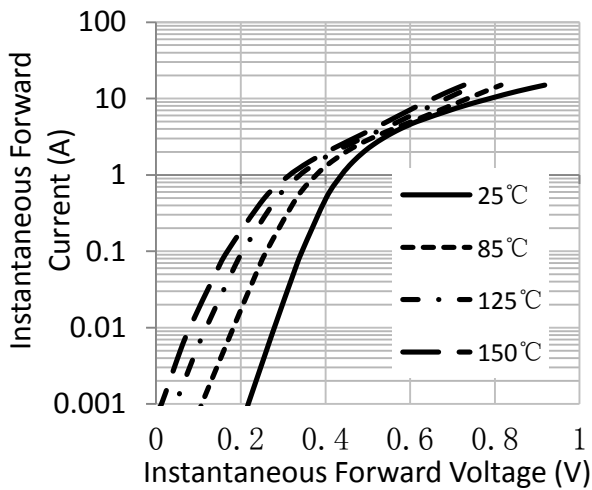


Figure 3. Typical Instantaneous Forward Characteristics

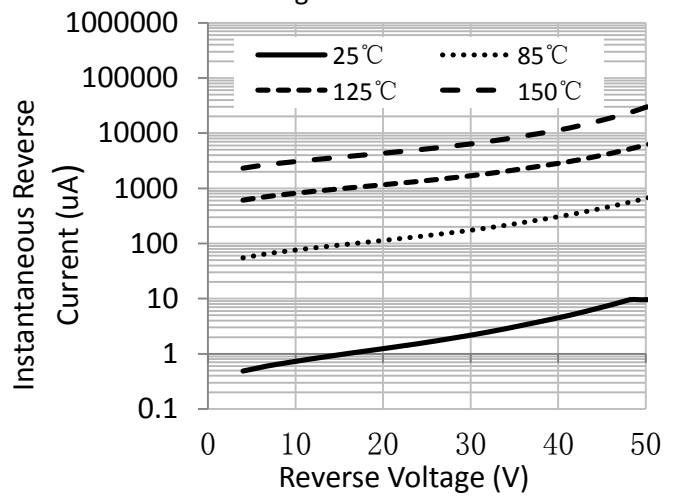


Figure 4. Typical Reverse Characteristics

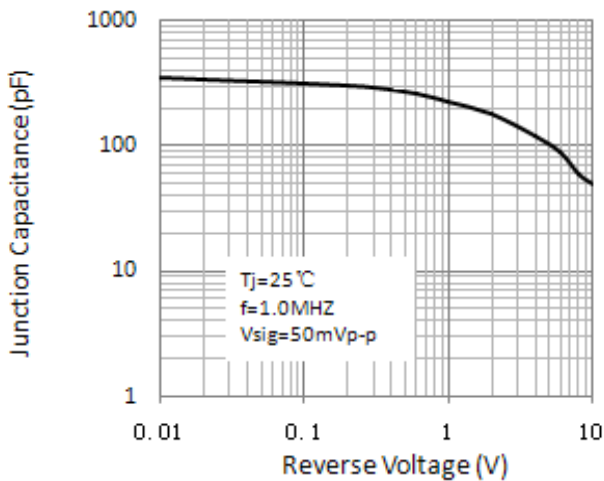


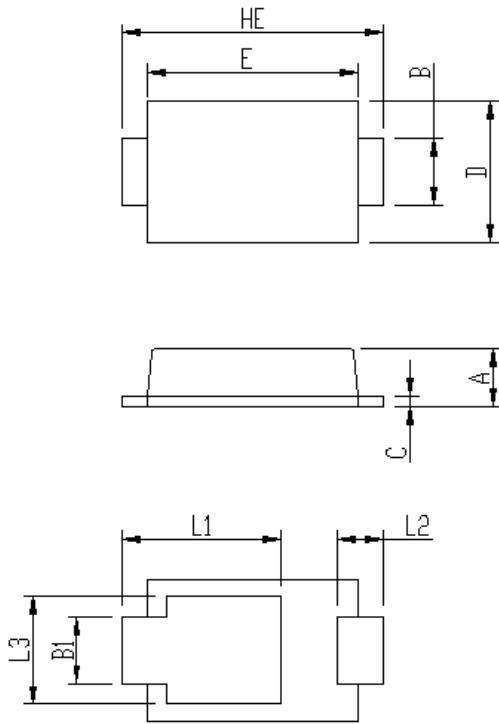
Figure 5. Typical Junction Capacitance

GSPS22 thru GSPS24

Surface Mount Schottky Rectifier
 Reverse Voltage 20-40V Forward Current 2A

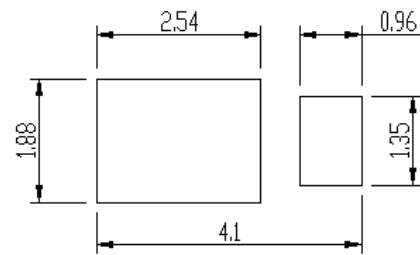
Package Outline Dimensions

Package: 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



Order Information

Device	Package	Marking	Carrier	Quantity
GSPS22	iSGA (SOD-123HS)	PS22	Tape & Reel	3,000pcs / Reel
GSPS23	iSGA (SOD-123HS)	PS23	Tape & Reel	3,000pcs / Reel
GSPS24	iSGA (SOD-123HS)	PS24	Tape & Reel	3,000pcs / Reel