PS1150 thru PS1200

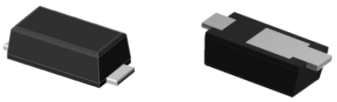
Surface Mount Schottky Rectifier

Reverse Voltage 150~200V Forward Current 1A

Features

- Heatsink structure
- Low profile, typical thickness 0.8mm
- Super Low VF Schottky barrier diodes
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260℃/10 seconds

RoHS COMPLIANT



iSGA
(SOD-123HS)

Typical Applications

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

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

Parameter	Symbol	PS1150	PS1200	Unit
Maximum repetitive peak reverse voltage	VRRM	150	200	V
Maximum RMS voltage	VRMS	105	140	V
Maximum DC blocking voltage	VDC	150	200	V
Maximum average forward rectified current	IF(AV)	1.0		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	40.0		A
Operating junction temperature range	TJ	- 55 to + 150		°C
Storage temperature range	TSTG	- 55 to + 150		°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)

Parameter	Test Conditions	Symbol	PS1150	PS1200	Unit
Minimum Breakdown voltage	Ta=25℃,IR=1mA	V_{BR}	150	200	Volts
Maximum instantaneous forward voltage	IF=0.5A,TA=25℃	V_F	0.80		Volts
	IF=1 A,TA=25℃		0.85		Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	I_R	2		uA
	TA=125℃		200		uA
Typical thermal resistance	juntion to ambient	$R_{\theta JA}$ 1)	65		℃/W
	juntion to lead	$R_{\theta JL}$ 1)	9		℃/W
	juntion to case	$R_{\theta JC}$ 2)	35		℃/W

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

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

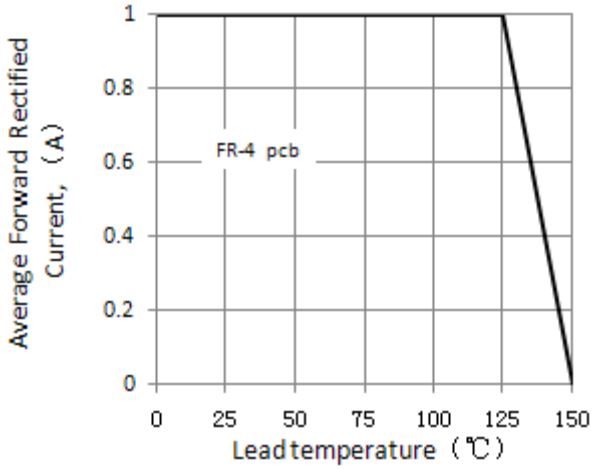


Figure 1.Forward Current Derating Curve

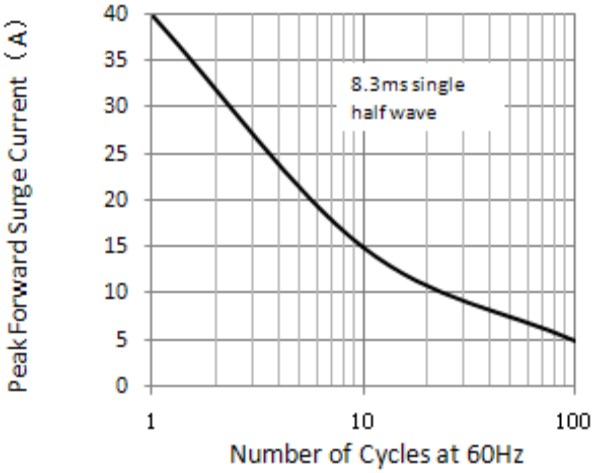


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

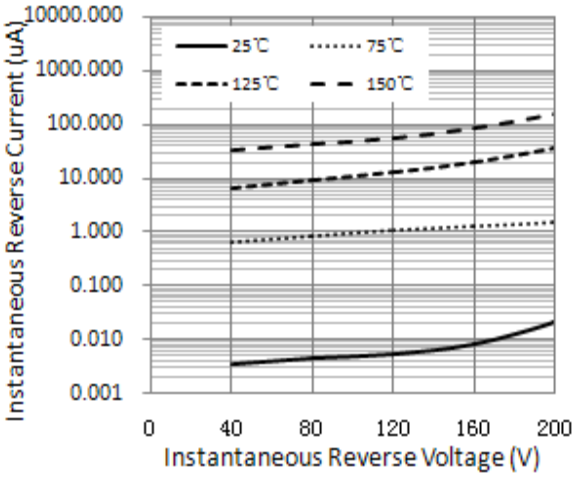


Figure 3. Typical Instantaneous Reverse Characteristics

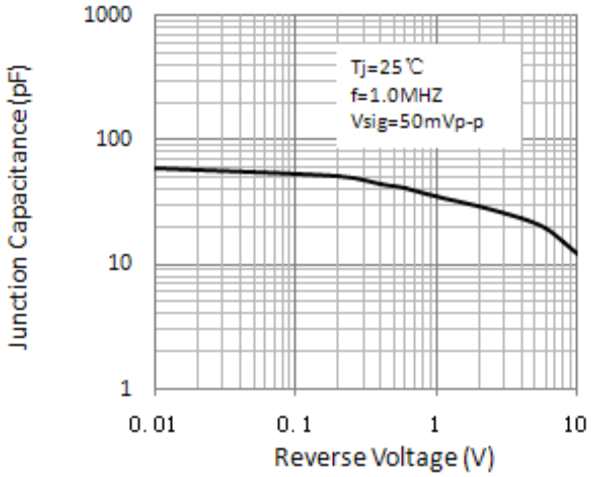


Figure 4. Typical Junction Capacitance

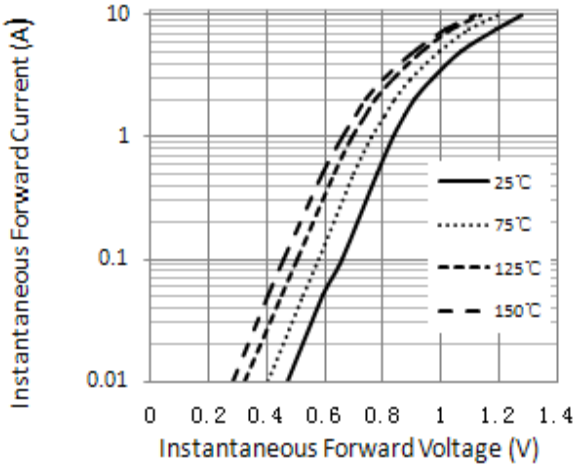
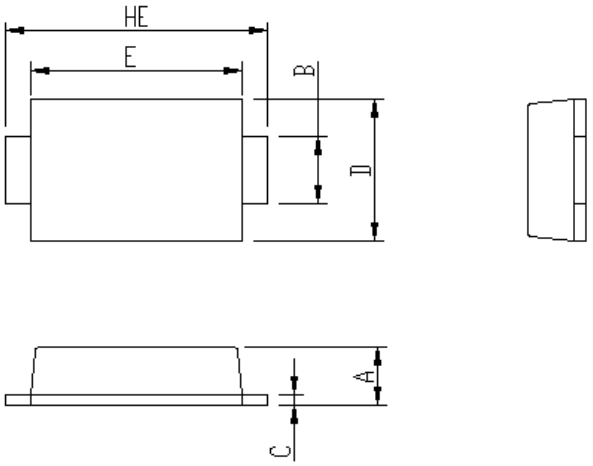
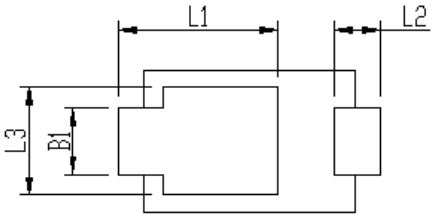


Figure 5. Typical Instantaneous Forward Characteristics

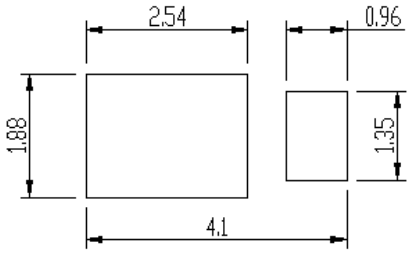
Package Outline Dimensions



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

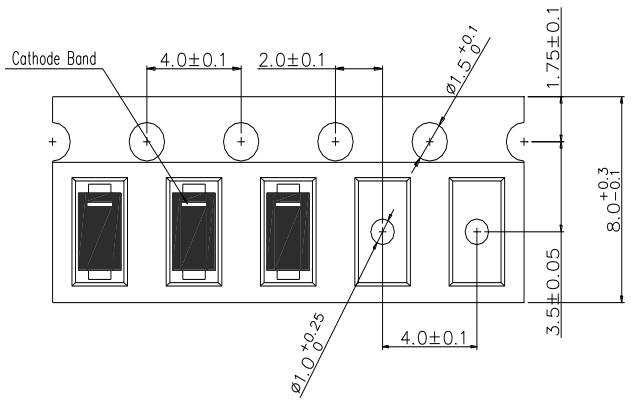


Packing Information

Packing quantities:

Reel size	Quantity/reel	Quantity/inner Box	Quantity/Carton
7"	3K	30K	120K

Tape & Reel Specification



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