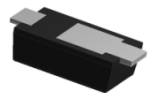
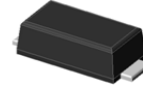


Features

- 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°C/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	PS12	PS13	PS14	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V
Maximum RMS voltage	VRMS	14	21	28	V
Maximum DC blocking voltage	VDC	20	30	40	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	30			A
Rating for fusing(t<8.3ms)	I ² t	4			A ² sec
Operating junction temperature range	T _J	- 55 to + 150			°C
Storage temperature range	T _{STG}	- 55 to + 150			°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)						
Parameter	Test Conditions	Symbol	PS12	PS13	PS14	Unit
Minimum Breakdown voltage	Ta=25°C,IR=1mA	V _{BR}	20	30	40	Volts
Maximum instantaneous forward voltage	IF=1A,Ta=25°C	V _F	0.50			
	IF=1A,Ta=75°C		0.50			
Maximum DC reverse current at rated DC blocking voltage	Ta=25°C	I _R	50			uA
	Ta=75°C		1			mA
Typical junction capacitance	4.0 V, 1 MHz	C _J	51.2			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 5x5mm 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°C unless otherwise noted)

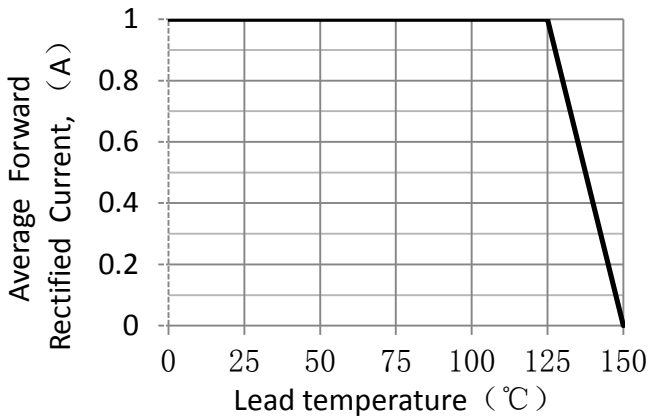


Figure 1. Forward Current Derating Curve

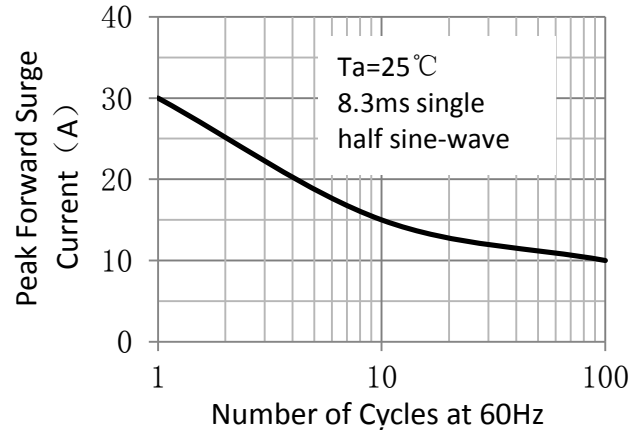


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

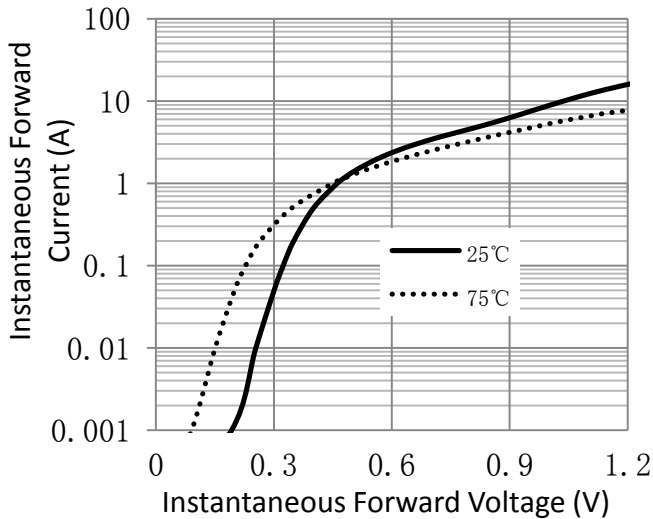


Figure 3. Typical Instantaneous Forward Characteristics

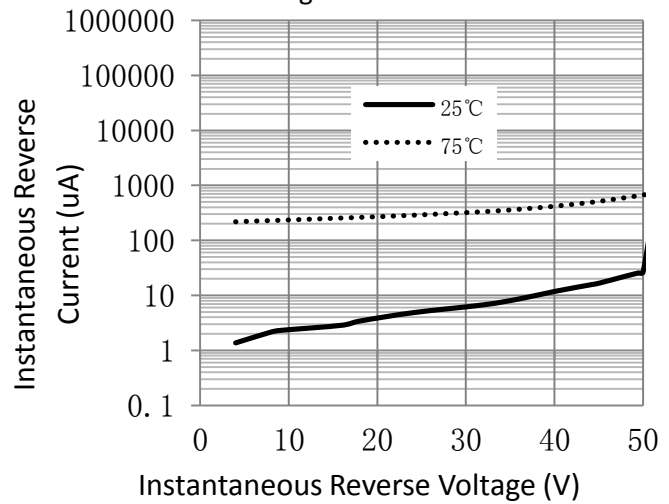


Figure 4. Typical Reverse Characteristics

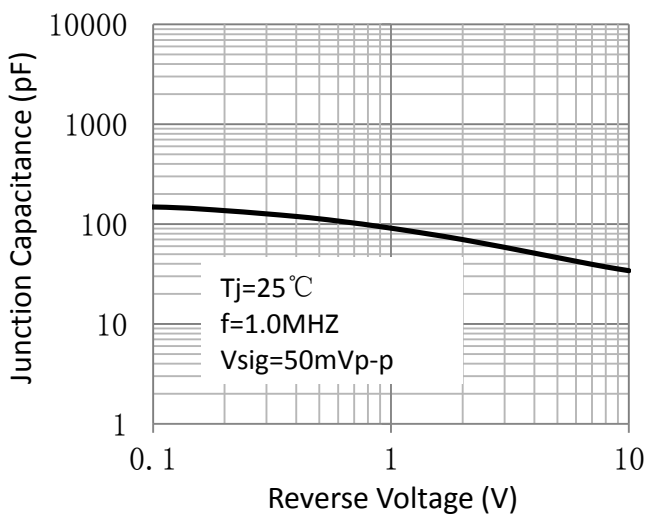
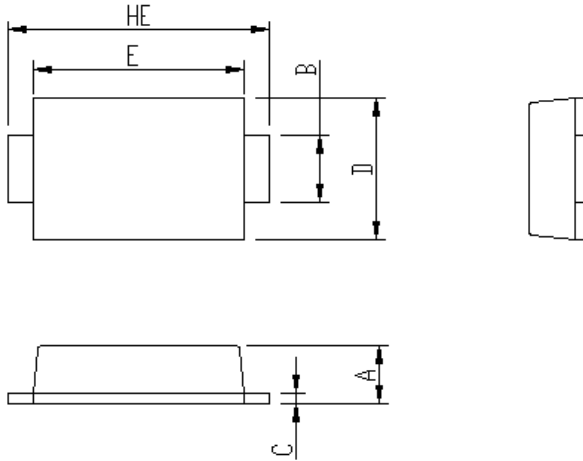


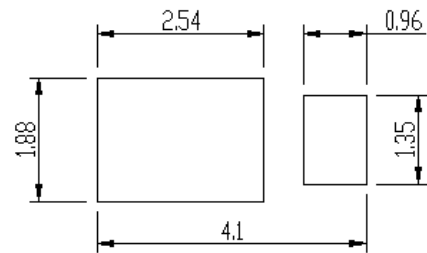
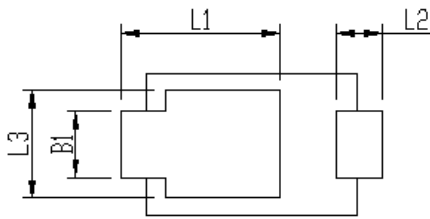
Figure 5. Typical Junction Capacitance

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

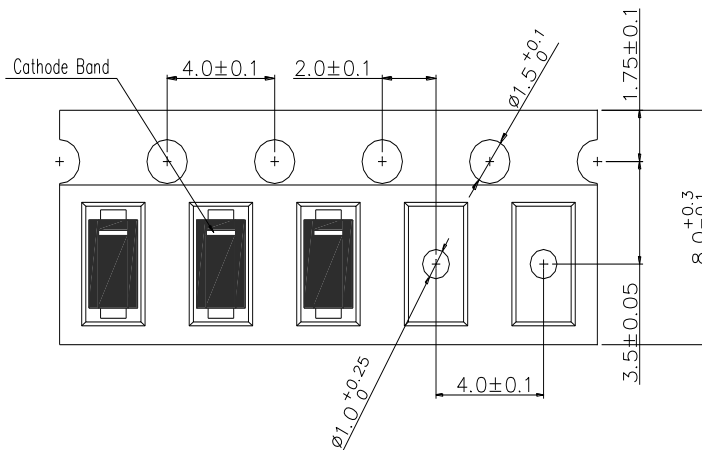


Packing Information

Packing quantities:

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

Tape & Reel Specification





PS12 thru PS14

Surface Mount Schottky Rectifier

Reverse Voltage 20~40V Forward Current 1.0A

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