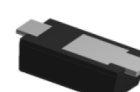
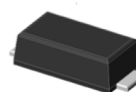


Features

- 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 switching 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	juntion to ambient	R _{θJA} ¹⁾	65			°C/W
	juntion to lead	R _{θJL} ¹⁾	9			
	juntion 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

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

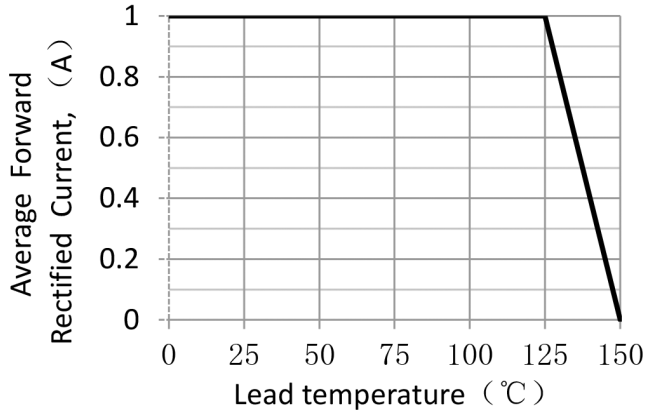


Figure 1. Forward Current Derating Curve

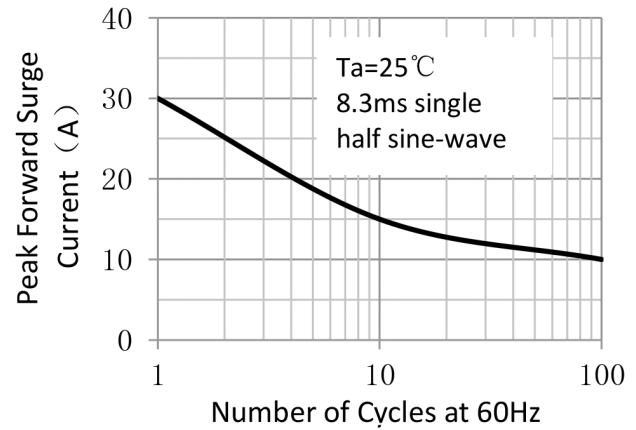


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

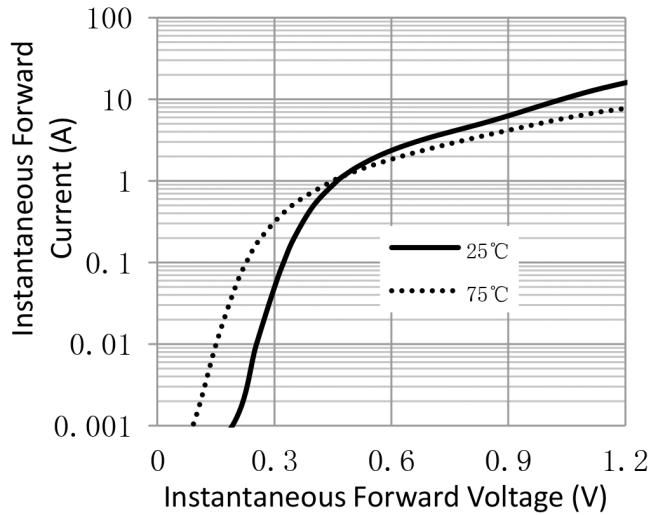


Figure 3. Typical Instantaneous Forward Characteristics

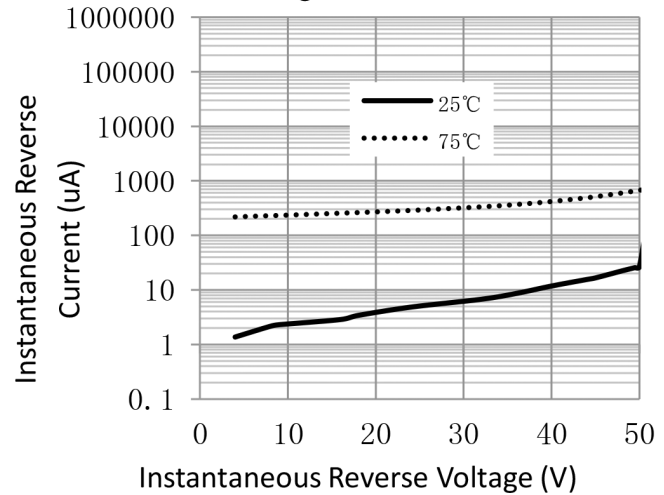


Figure 4. Typical Reverse Characteristics

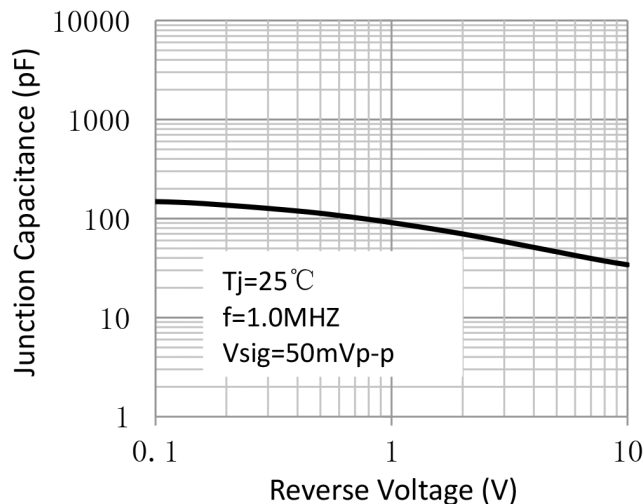
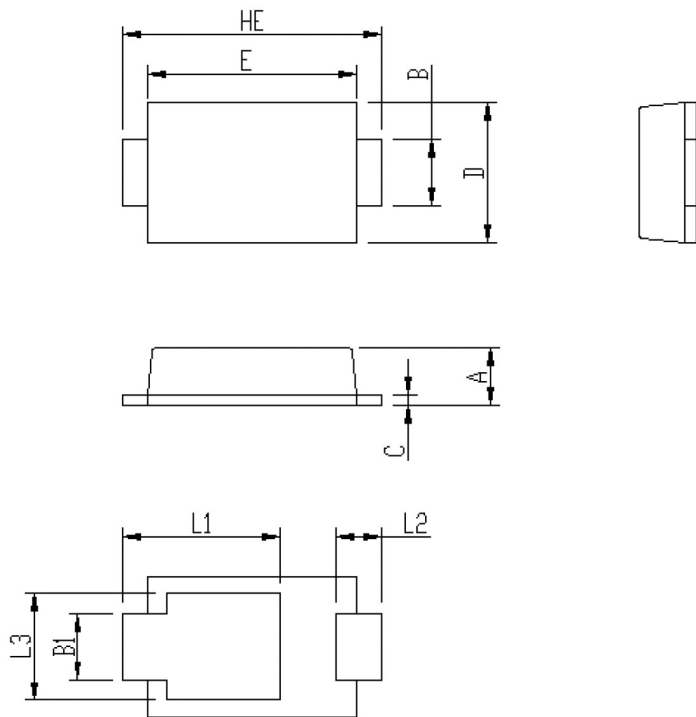


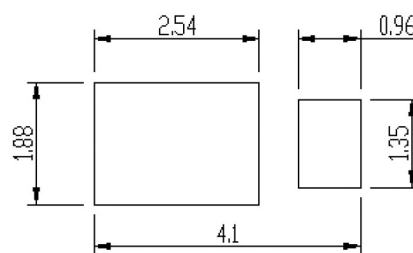
Figure 5. Typical Junction Capacitance

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

