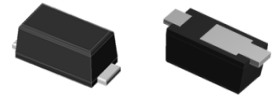


## Features

- 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)



## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	GP22	GP23	GP24	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	V
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	2.0			A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50			A
Rating for fusing(t<8.3ms)	I <sup>2</sup> t	10			A <sup>2</sup> sec
Operating junction temperature range	T <sub>J</sub>	- 55 to + 150			°C
Storage temperature range	T <sub>STG</sub>	- 55 to + 150			°C

## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	GP22	GP23	GP24	Unit
Minimum Breakdown voltage	T <sub>A</sub> =25°C, I <sub>R</sub> =1mA	V <sub>BR</sub>	20	30	40	V
Maximum instantaneous forward voltage	I <sub>F</sub> =2A T <sub>A</sub> =25°C	V <sub>F</sub>	0.51			
	I <sub>F</sub> =2A T <sub>A</sub> =125°C	V <sub>F</sub>	0.45			
Maximum DC reverse current at rated DC blocking voltage	T <sub>A</sub> =25°C	I <sub>R</sub>	50			uA
	T <sub>A</sub> =125°C		15			mA
Typical junction capacitance	4.0 V, 1 MHz	C <sub>J</sub>	120			pF
Typical thermal resistance <sup>1)</sup>	junction to ambient	R <sub>θJA</sub>	110			°C/W
	junction to case	R <sub>θJC</sub>	20			
	junction to lead	R <sub>θJL</sub>	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)

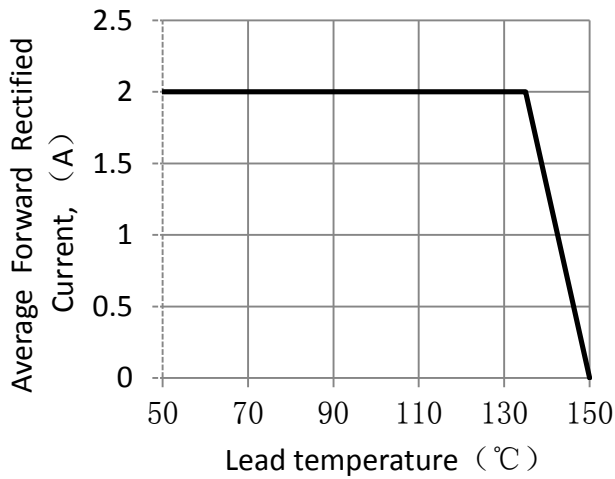


Figure 1. Forward Current Derating Curve

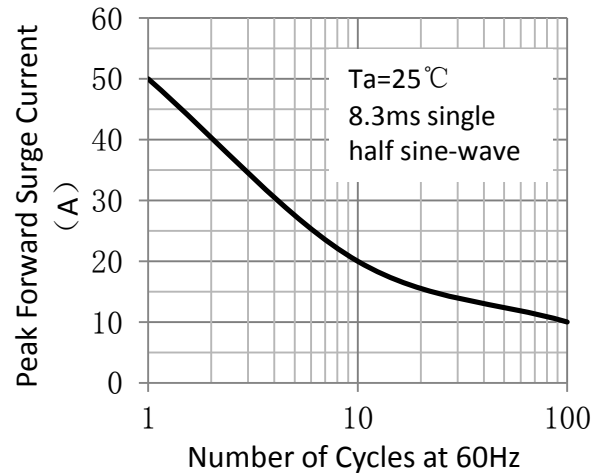


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

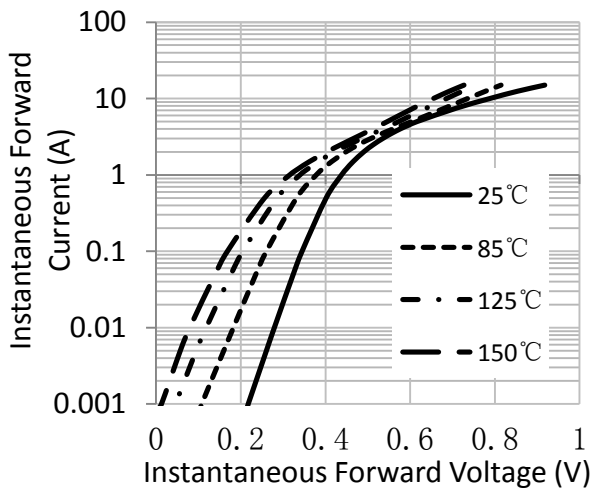


Figure 3. Typical Instantaneous Forward Characteristics

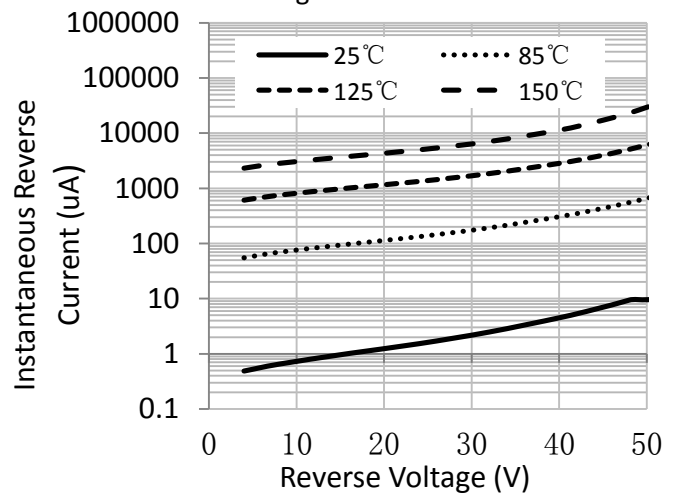


Figure 4. Typical Reverse Characteristics

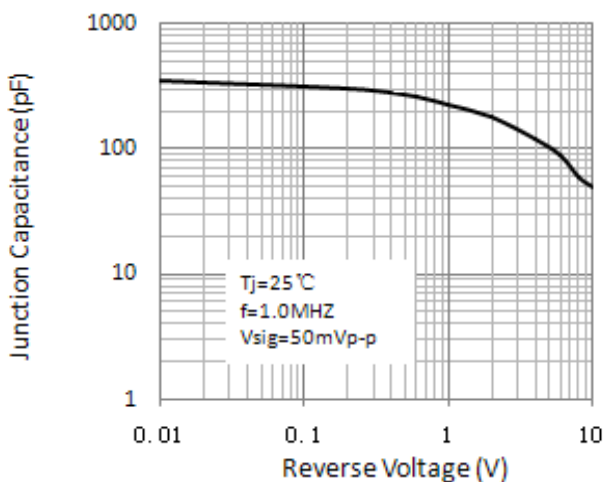
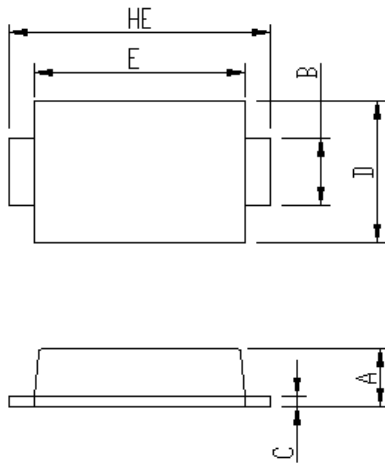


Figure 5. Typical Junction Capacitance

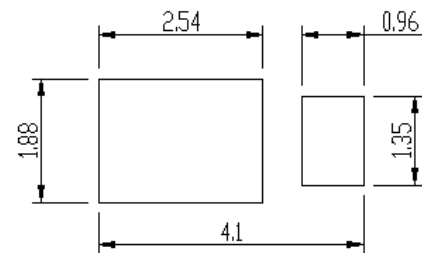
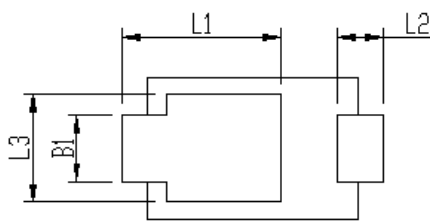
## Package Outline Dimensions

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



## Packing Information

### Packing Quantities

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

### Tape & Reel Specification

