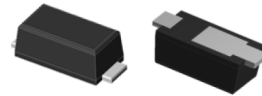


Features

- Glass passivated Standard Rectifiers
- Low profile, typical thickness 0.8mm
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Heatsink structure
- High temperature soldering guaranteed: 260°C/10 seconds



RoHS
COMPLIANT



iSGA
(SOD-123HS)

Typical Applications

For use of general purpose rectification in lighting, cellular phone, portable device, power supply and other consumer applications.

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

Parameter	Symbol	P1A	P2A	P3A	P4A	P5A	P6A	P7A	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	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							A
Rating for fusing(t<8.3ms)	I ² t	7							A ² sec
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150							°C

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

Parameter	Test Conditions	Symbol	P1A	P2A	P3A	P4A	P5A	P6A	P7A	Unit
Minimum Breakdown voltage	Ta=25°C,IR=100uA	V _{BR}	400				600	1000		Volts
Maximum instantaneous forward voltage	Ta=25°C,IF=1.0A Ta=125°C,IF=1.0A	V _F	1.0 0.88							
Maximum DC reverse current at rated DC blocking voltage	Ta=25°C Ta=125°C	I _R	5 50							µA
Typical reverse recovery time	I _F =0.5A,I _R =1.0A, I _{rr} =0.25A	t _{rr}	1.5							uS
Typical junction capacitance	4.0 V, 1 MHz	C _J	6.5							pF
Typical thermal resistance ¹⁾	junction to ambient	R _{θJA}	TBD							°C/W
	junction to case	R _{θJC}	TBD							
	junction to lead	R _{θJL}	TBD							

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

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

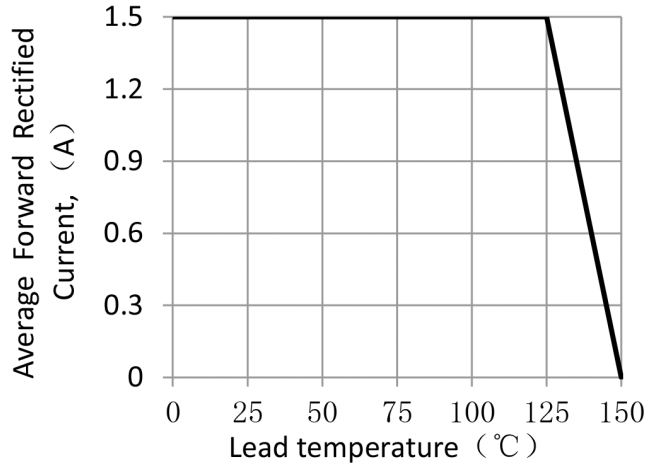


Figure 1. Forward Current Derating Curve

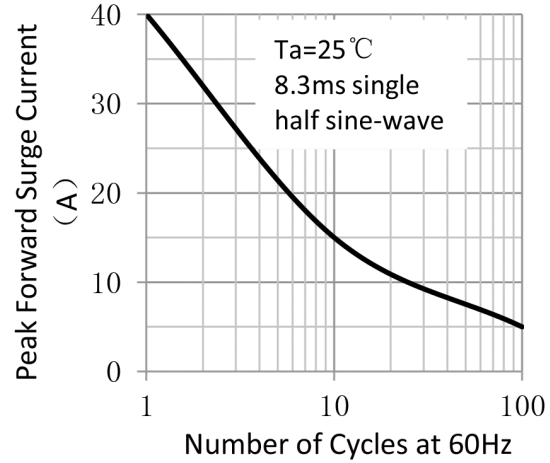


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

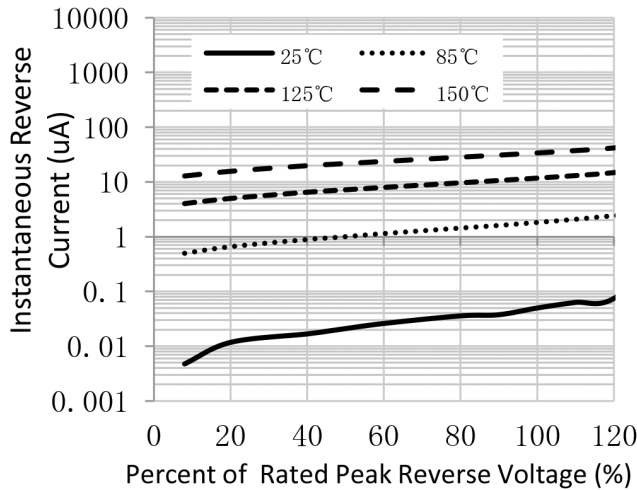


Figure 3. Typical Reverse Characteristics

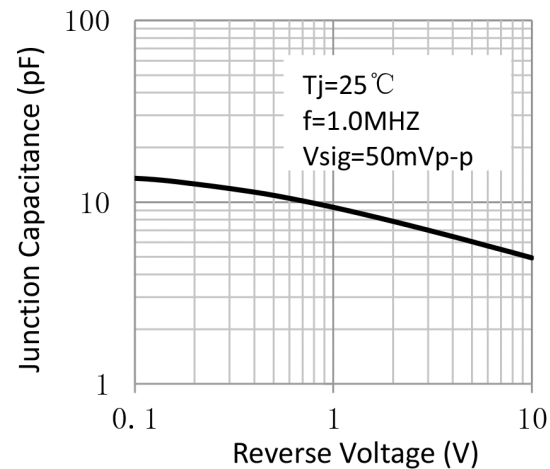


Figure 4. Typical Junction Capacitance

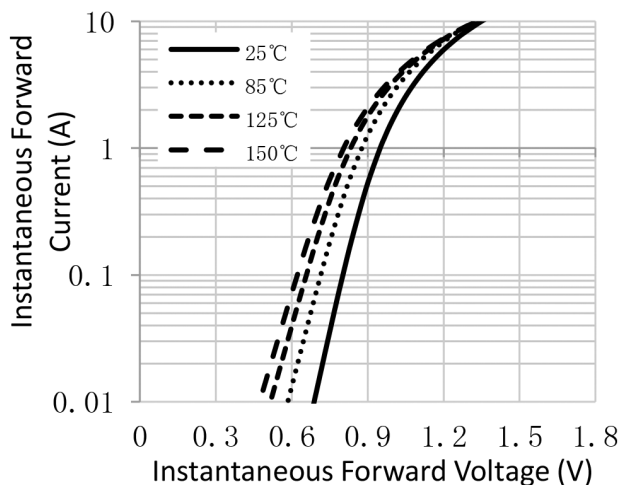
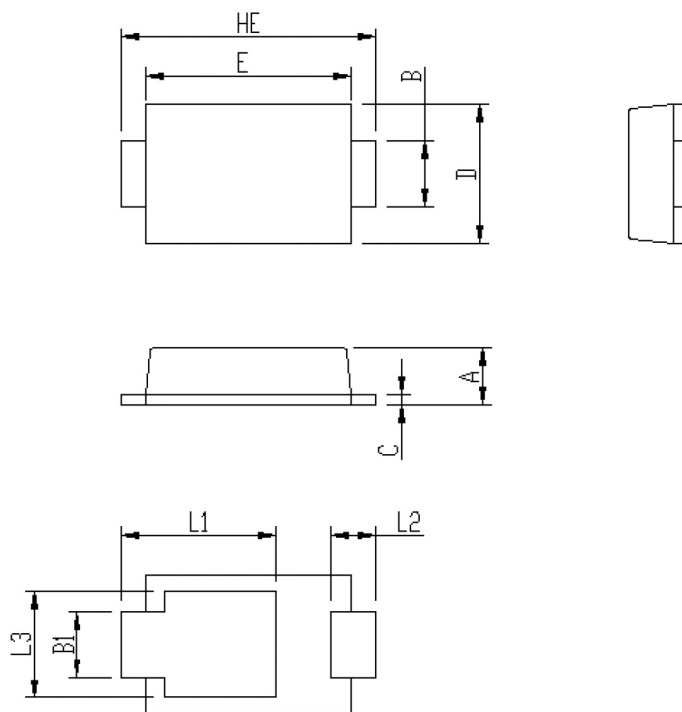


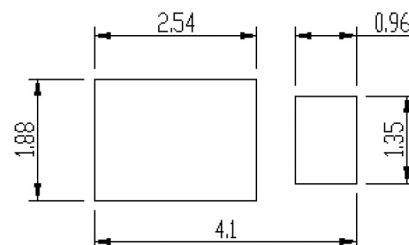
Figure 5. Typical Instantaneous Forward Characteristics

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

