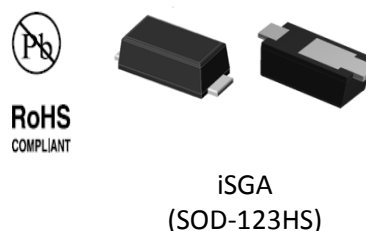


### Features

- 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



### Typical Applications

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

<b>Maximum Ratings</b> (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 <sup>2</sup> t	7							A <sup>2</sup> sec
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150							°C

<b>Electrical Characteristics</b> (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 <sub>BR</sub>	400			600	1000			Volts
Maximum instantaneous forward voltage	Ta=25°C, IF=1.0A Ta=125°C, IF=1.0A	V <sub>F</sub>	1.0			0.88				
Maximum DC reverse current at rated DC blocking voltage	Ta=25°C Ta=125°C	I <sub>R</sub>	5			50			µA	
Typical reverse recovery time	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A	t <sub>rr</sub>	1.5						uS	
Typical junction capacitance	4.0 V, 1 MHz	C <sub>J</sub>	6.5						pF	
Typical thermal resistance	junction to ambient	R <sub>θJA</sub> <sup>1)</sup>	63						°C/W	
	junction to lead	R <sub>θJL</sub> <sup>1)</sup>	9							
	junction to case	R <sub>θJC</sub> <sup>2)</sup>	39							

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)

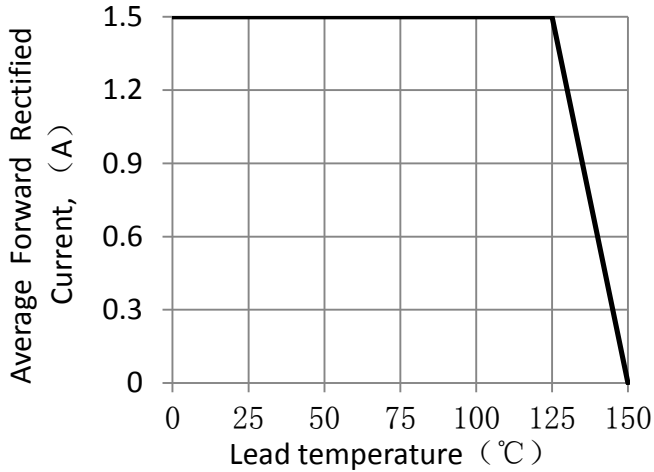


Figure 1. Forward Current Derating Curve

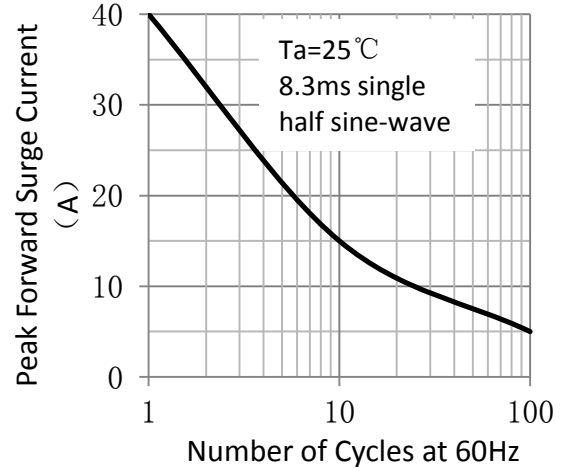


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

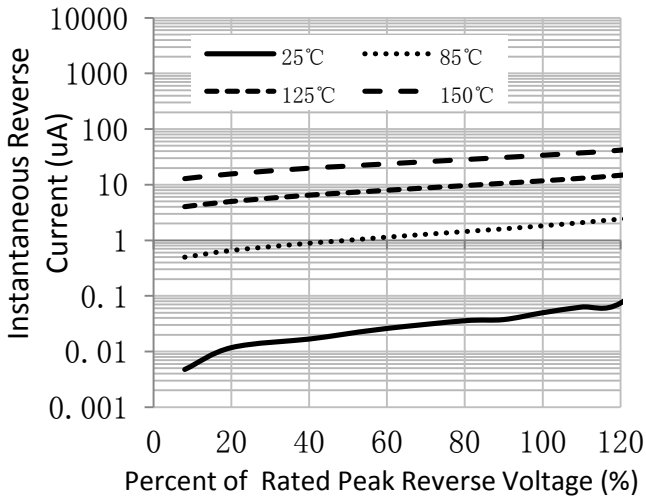


Figure 3. Typical Reverse Characteristics

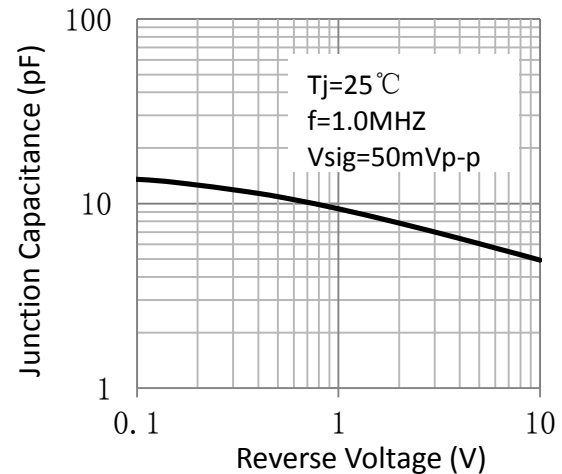


Figure 4. Typical Junction Capacitance

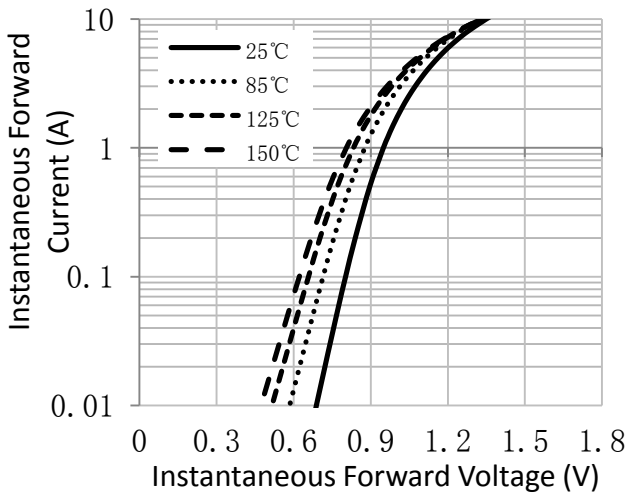
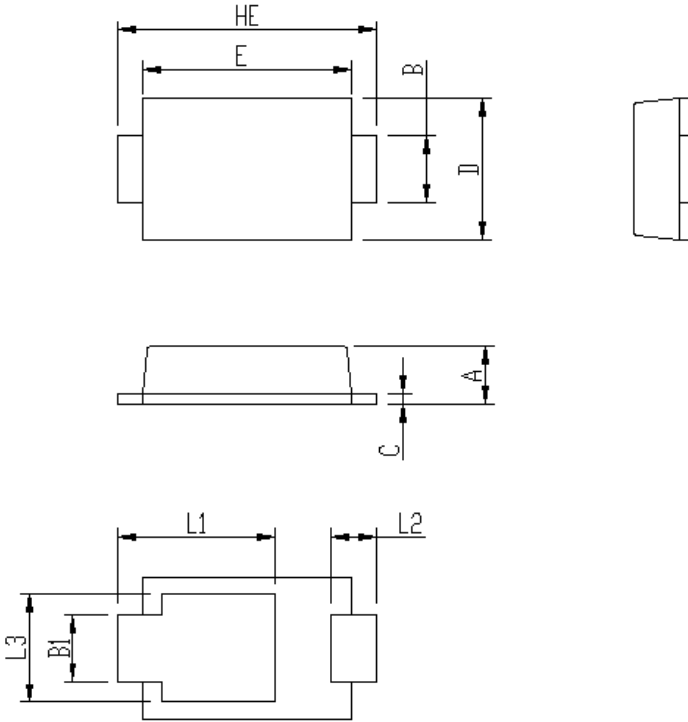


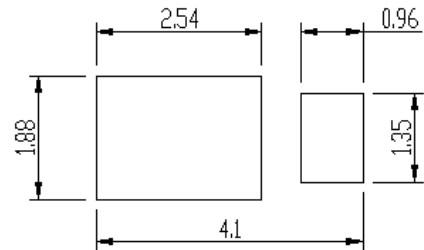
Figure 5. Typical Instantaneous Forward Characteristics

## 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

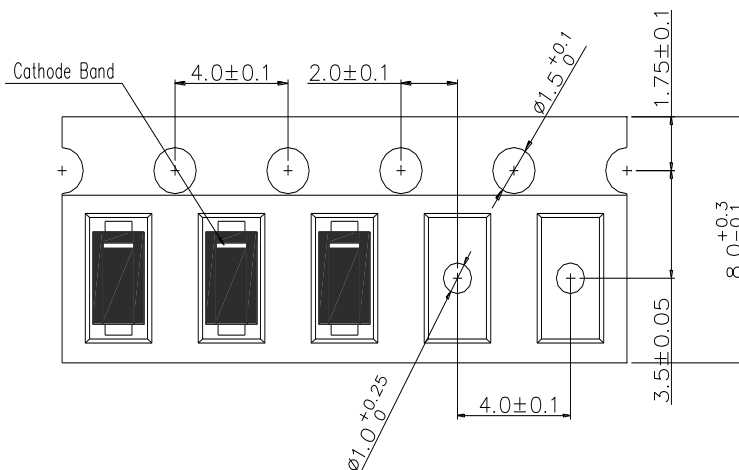


## Packing Information

Packing quantities:

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

Tape & Reel Specification





# P1A thru P7A

Surface Mount Glass Passivated Standard Rectifier  
Reverse Voltage 50~1000V Forward Current 1A

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# P1A thru P7A

Surface Mount Glass Passivated Standard Rectifier  
Reverse Voltage 50~1000V Forward Current 1A

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