P151A thru P157A

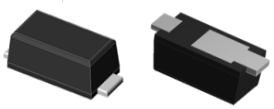
Surface Mount Glass Passivated Standard Rectifier

Reverse Voltage 50~1000V Forward Current 1.5A

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℃/10 seconds

RoHS COMPLIANT



iSGA
(SOD-123HS)

Typical Applications

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

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

Parameter	Symbol	P151A	P152A	P153A	P154A	P155A	P156A	P157A	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)	1.5							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	55							A
Rating for fusing(t＜8.3ms)	I^2t	13							A^2sec
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150							°C

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

Parameter	Test Conditions	Symbol	P151A	P152A	P153A	P154A	P155A	P156A	P157A	Unit
Minimum Breakdown voltage	Ta=25℃,IR=100uA	V_{BR}	400				600	1000		Volts
Maximum instantaneous forward voltage	IF=1.5 A,Ta=25℃	V_F	1.0							
	IF=1.5 A,Ta=125℃		0.88							
Maximum DC reverse current at rated DC blocking voltage	Ta=25℃	I_R	5							μA
	Ta=125℃		50							
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	10							pF
Typical thermal resistance	juntion to ambient	$R_{\theta JA}$ 1)	63							℃/W
	juntion to lead	$R_{\theta JL}$ 1)	9							
	juntion to case	$R_{\theta JC}$ 2)	39							

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℃ unless otherwise noted)

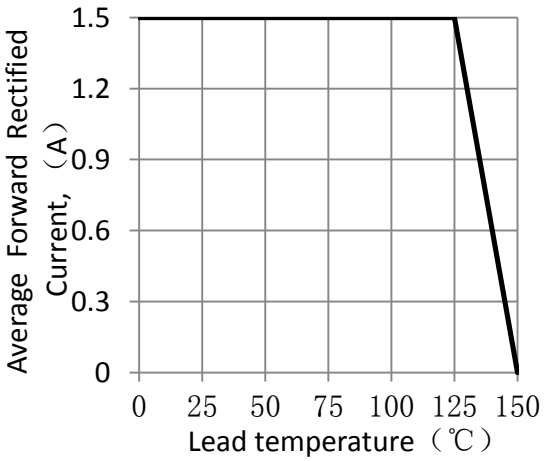


Figure 1.Forward Current Derating Curve

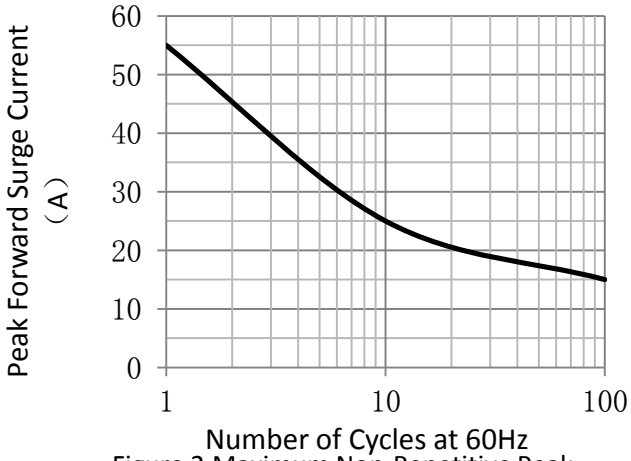


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

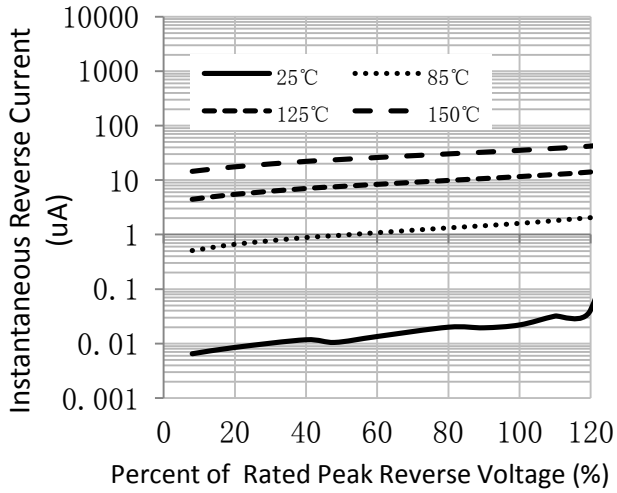


Figure 3. Typical Reverse Characteristics

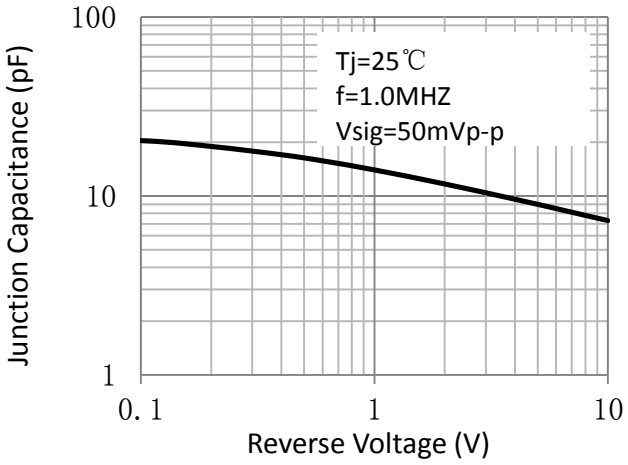


Figure 4. Typical Junction Capacitance

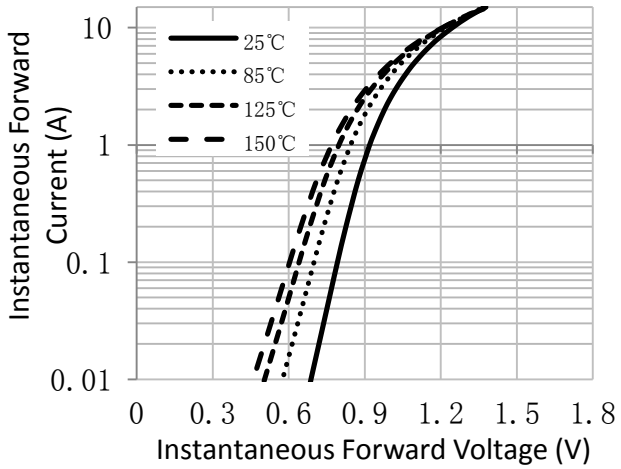


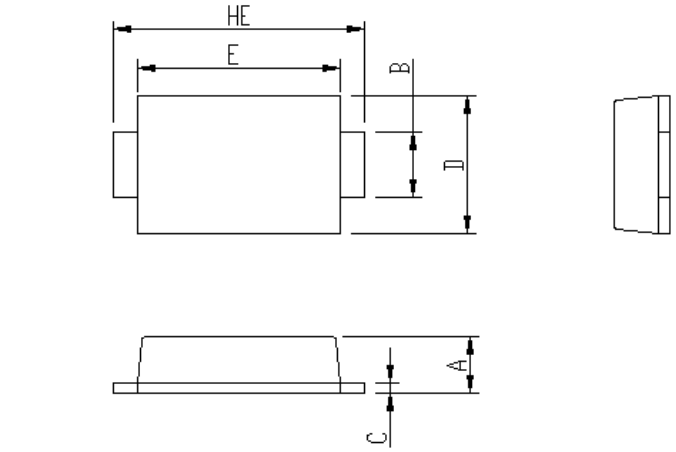
Figure 5. Typical Instantaneous Forward Characteristics

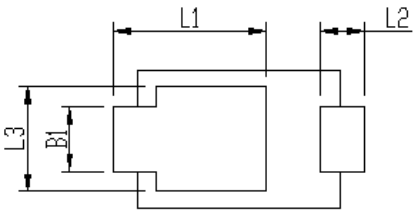
P151A thru P157A

Surface Mount Glass Passivated Standard Rectifier

Reverse Voltage 50~1000V Forward Current 1.5A

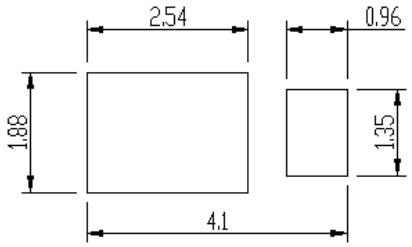
Package Outline Dimensions





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

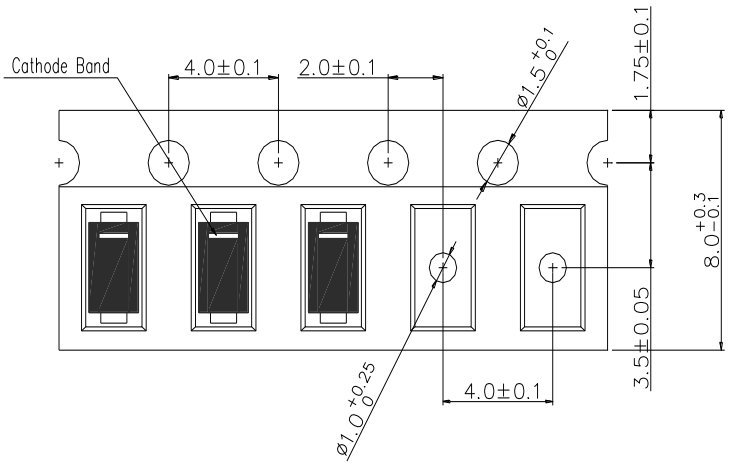


Packing Information

Packing quantities:

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

Tape & Reel Specification



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