PF27/P2F7

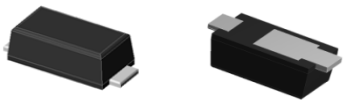
Surface Mount Glass Passivated Fast Recovery Rectifier

Reverse Voltage 1000V Forward Current 2A

Features

- Glass passivated fast recovery rectifiers
- Heatsink structure
- Low profile, typical thickness 0.8mm
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s

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	PF27/P2F7	Unit
Maximum repetitive peak reverse voltage	VRRM	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC blocking voltage	VDC	1000	V
Maximum average forward rectified current	IF(AV)	2.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	60	A
Rating for fusing(t＜8.3ms)	I^2t	15.0	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	PF27/P2F7	Unit
Minimum Breakdown voltage	Ta=25℃,IR=100uA	V_{BR}	1000	V
Maximum instantaneous forward voltage	IF=2 A,TA=25℃	V_F	1.3	
Maximum DC reverse current at rated DC blocking voltage	TA=25℃ TA=125℃	I_R	1 50	μA
Maximum reverse recovery time	I_F=0.5A,I_R=1.0A, I_{rr}=0.25A	t_{rr}	250	nS
Typical junction capacitance	4.0 V, 1 MHz	C_J	10	pF
Typical thermal resistance	juntion to ambient	$R_{\theta JA}$ 1)	60	℃/W
	juntion to lead	$R_{\theta JL}$ 1)	10	
	juntion to case	$R_{\theta JC}$ 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℃ unless otherwise noted)

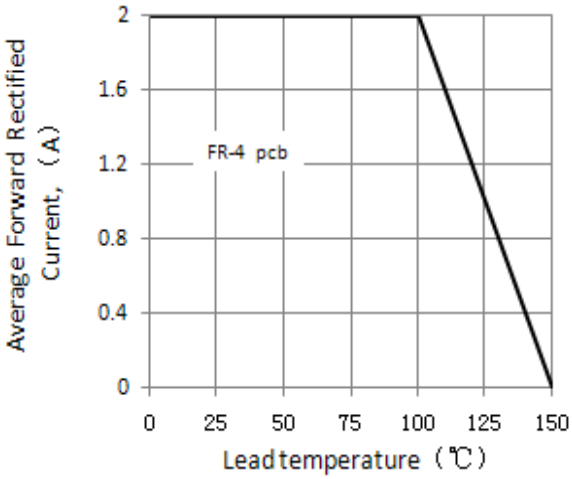


Figure 1.Forward Current Derating Curve

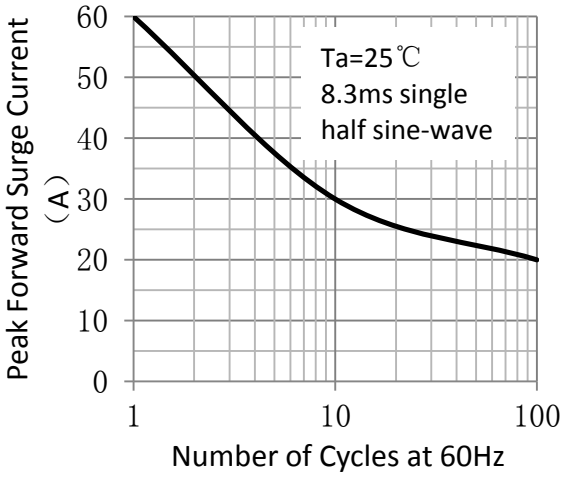


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

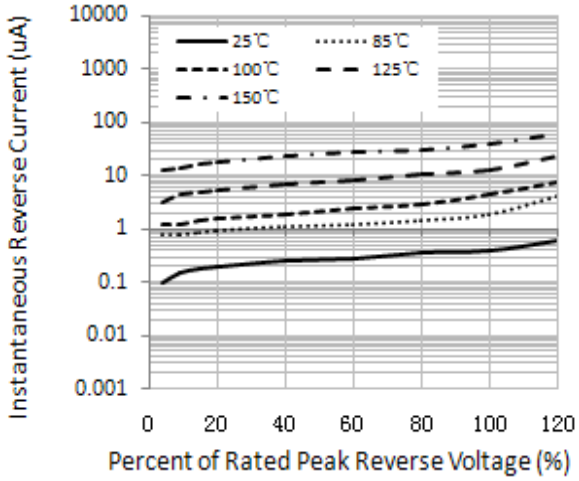


Figure 3. Typical Reverse Characteristics

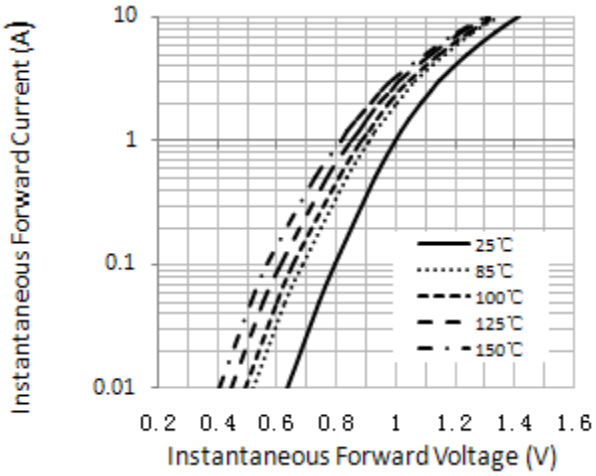


Figure 4. Typical Instantaneous Forward Characteristics

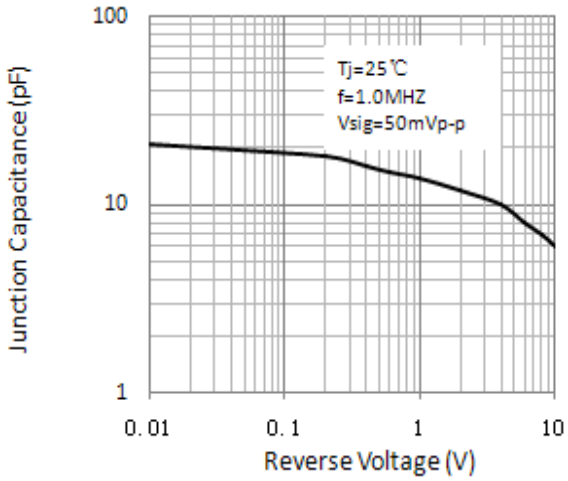
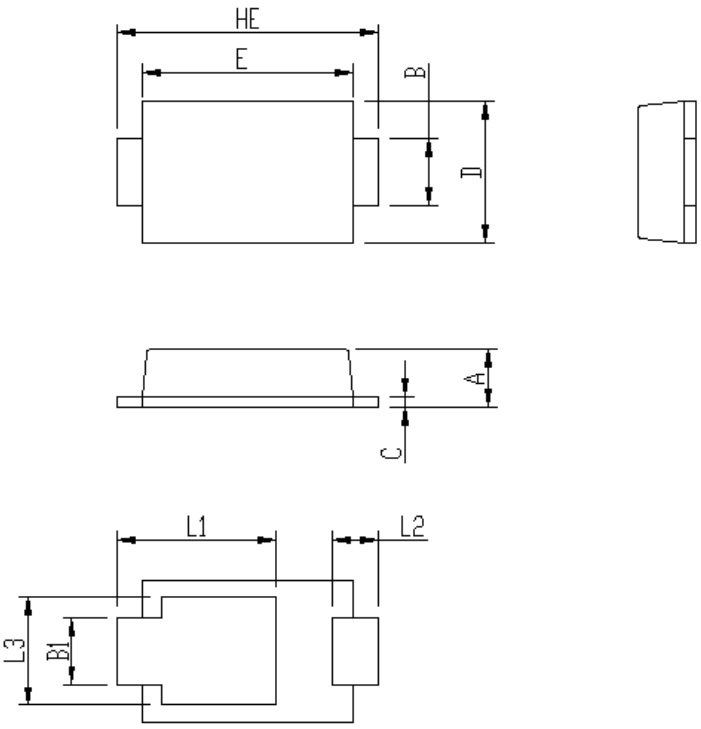


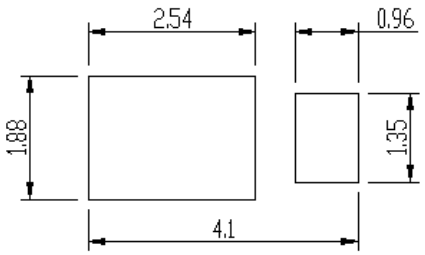
Figure 5. Typical Junction Capacitance

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

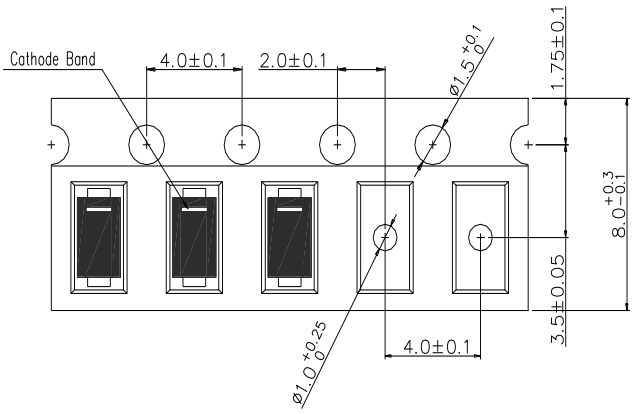


Packing Information

Packing quantities:

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

Packing Tape Specification



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