Surface Mount Superfast Recovery Rectifier

Feature

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Superfast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives

Feature

- Case: SMBF
- Terminals: Solderable per MIL-STD-750, Method 2026.
- Approx. Weight: 57mg / 0.002oz

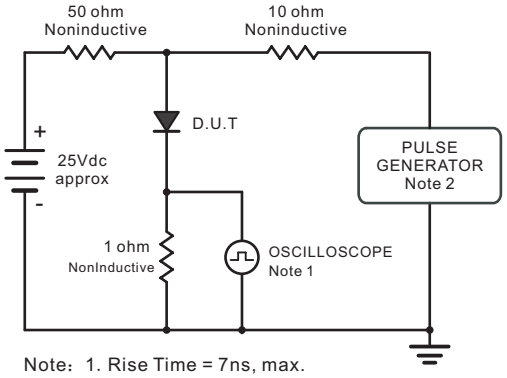
Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

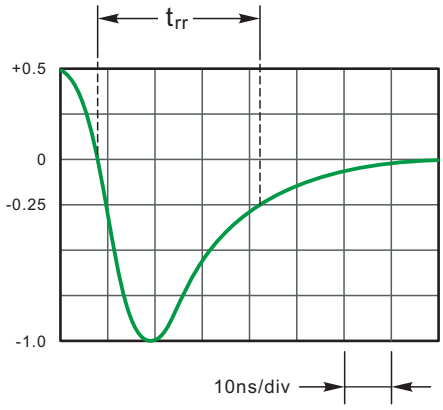
Parameter	Symbol	PES2ABF	PES2BBF	PES2CBF	PES2DBF	PES2EBF	PES2GBF	PES2JBF	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current at TL = 100°C	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load(JEDEC Method)	I_{FSM}	50							A
Maximum Forward Voltage at 2A	V_F	1				1.25		1.65	V
Maximum DC Reverse Current Ta=25℃ at Rated DC Blocking Voltage Ta=125℃	I_R	5 100							μA
Typical Junction Capacitance at V_R=4V, f=1MHz	C_j	45							PF
Maximum Reverse Recovery Time at I_F=0.5A, I_R=1A, I_{rr}=0.25A	t_{rr}	35							ns
Typical Thermal Resistance [1]	$R_{\theta JA}$	65							℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +150							℃

Note:

1. P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.



Note: 1. Rise Time = 7ns, max.
Input Impedance = 1megohm,22pF.
2. Ries Time =10ns, max.
Source Impedance = 50 ohms.



Set time Base for 10ns/div

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram

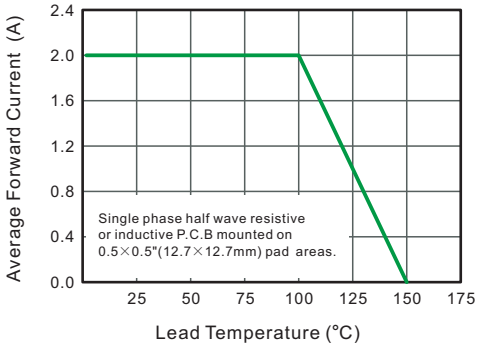


Fig.2 Maximum Average Forward Current Rating

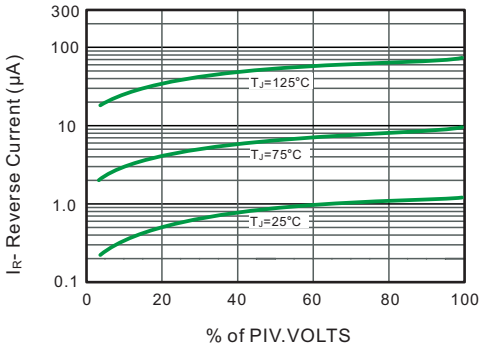


Fig.3 Typical Reverse Characteristics

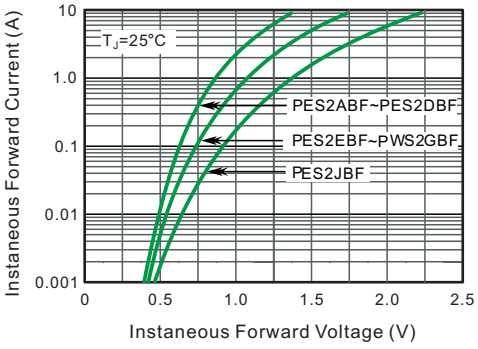


Fig.4 Typical Forward Characteristics

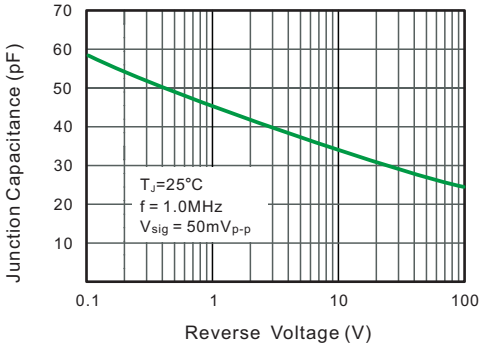


Fig.5 Typical Junction Capacitance

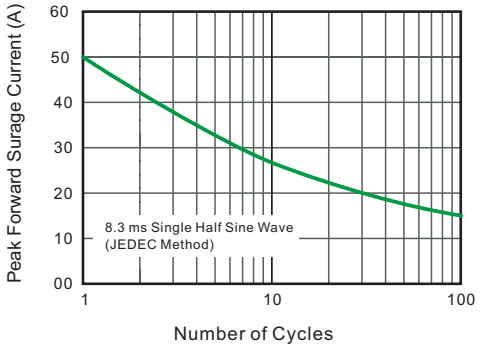
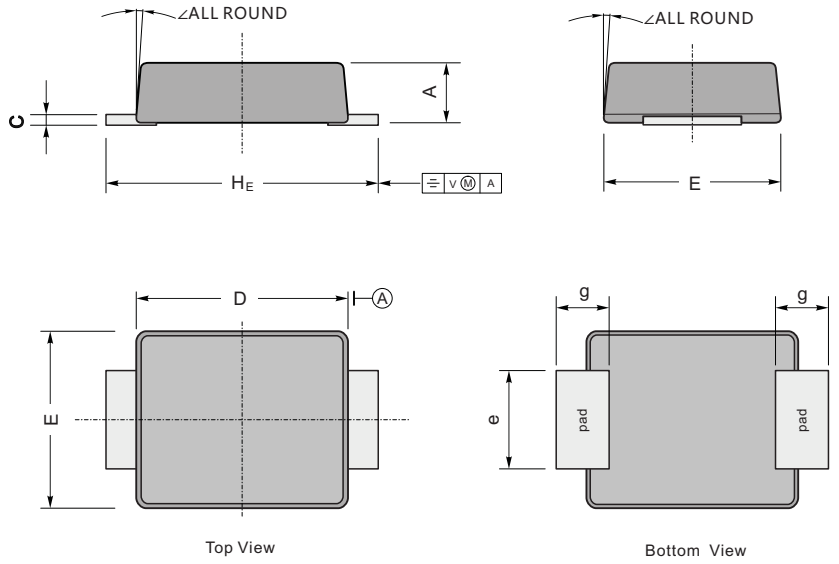


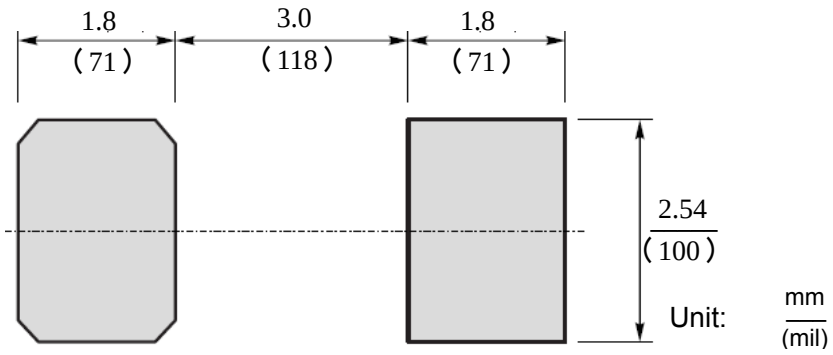
Fig.6 Maximum Non-Repetitive Peak Forward Surage Current

Product dimension (SMBF)



UNIT		A	C	D	E	H_E	e	g	∠
mm	max	1.3	0.26	4.4	3.7	5.5	2.2	1.0	9°
	min	1.1	0.18	4.2	3.5	5.1	1.9		
mil	max	51	10	173	146	216	86	40	
	min	43	7	165	138	200	75		

The recommended mounting pad size



Ordering information

Device	Package	Shipping
PES2ABF~PES2JBF	SMBF (Pb-Free)	5000/ Tape & Reel

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