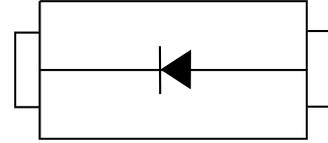


Feature

- 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



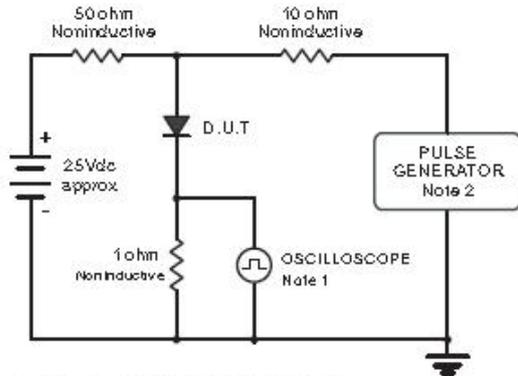
Mechanical Characteristics

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg 0.00086oz

Absolute maximum rating@25 °C

Parameter	Symbol	PES2 AF	PES2 BF	PES2 CF	PES2 DF	PES2 EF	PES2 GF	PES2 JF	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 $T_a = 100\text{ °C}$	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Maximum Forward Voltage at 2 A	V_F	1				1.25		1.7	V
Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 125\text{ °C}$	I_R	5 100							μA
Typical Junction Capacitance at $V_R = 4V$, $f = 1MHz$	C_j	60							pF
Maximum Reverse Recovery Time at $I_F = 0.5A$, $I_R = 1A$, $I_{rr} = 0.25A$	t_{rr}	35							nS
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							°C

Typical Characteristics



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

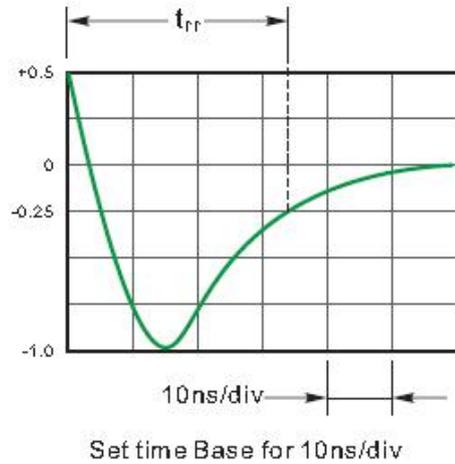


Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram

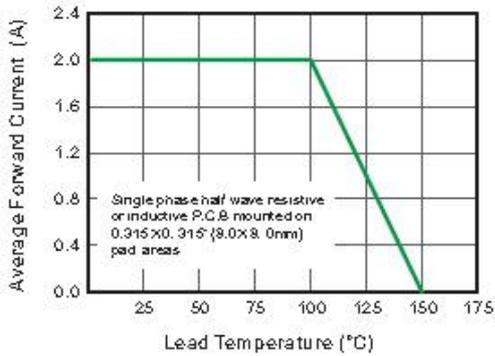


Fig.2 Maximum Average Forward Current Rating

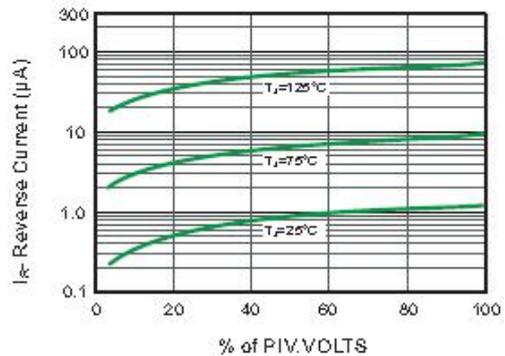


Fig.3 Typical Reverse Characteristic

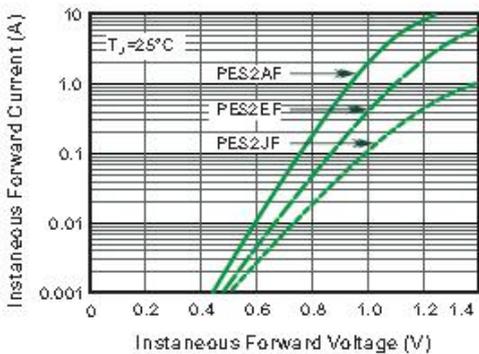


Fig.4 Typical Forward Characteristics

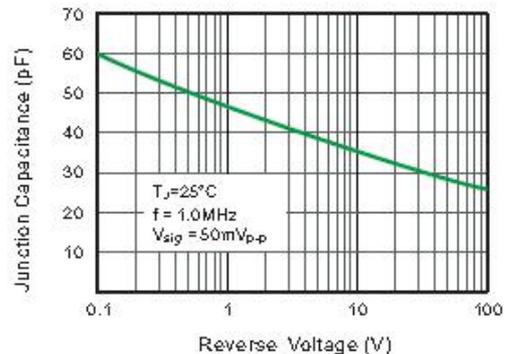
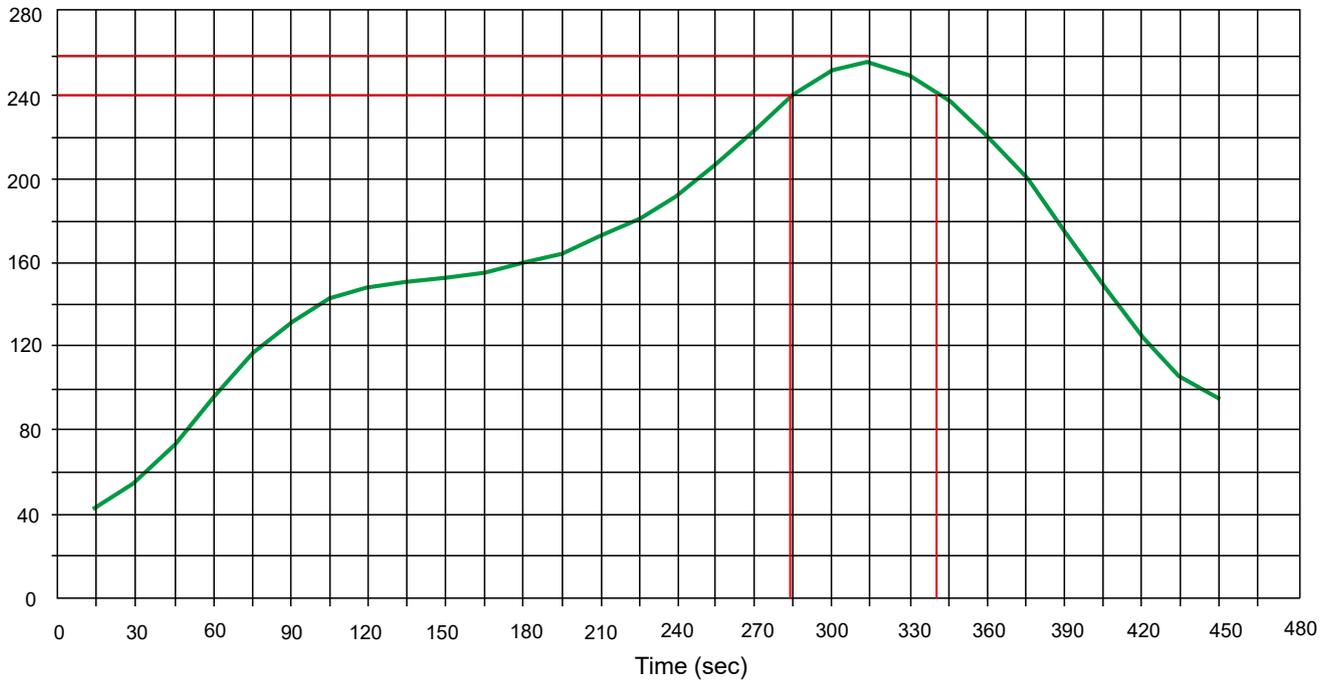


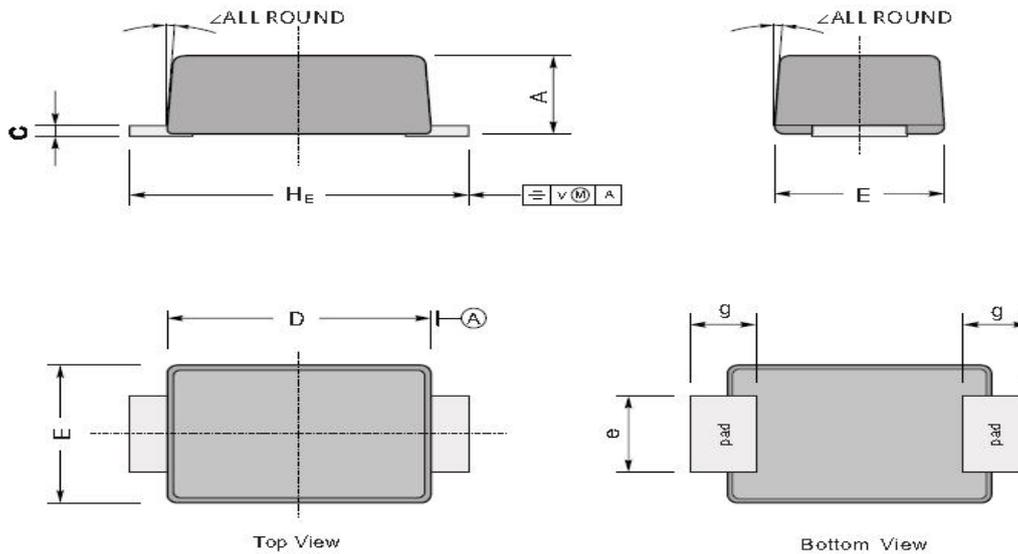
Fig.5 Typical Junction Capacitance

Solder Reflow Recommendation

Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec

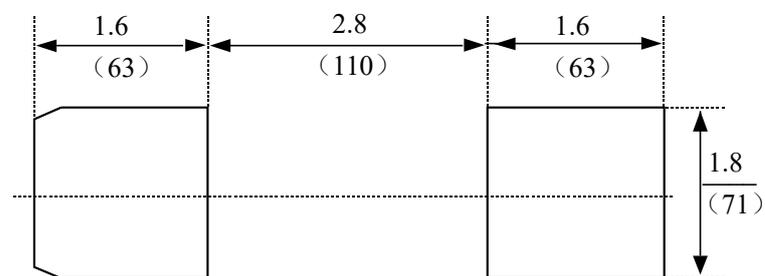


Product dimension (SMAF)



UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.3	0.23	3.7	2.7	1.6	1.3	4.9	7°
	min	1.1	0.18	3.3	2.4	1.3	1.0	4.4	
mil	max	51	9.1	146	106	63	51	193	
	min	43	7.1	130	94	51	39	173	

The recommended mounting pad size



Unit: $\frac{\text{mm}}{\text{mil}}$

Ordering information

Device	Package	Shipping
PES2AF-PES2JF	SMAF (Pb-Free)	3000/ Tape & Reel

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