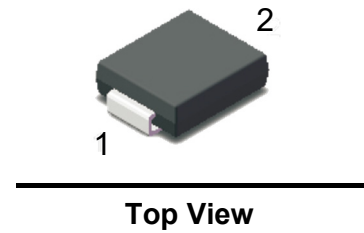
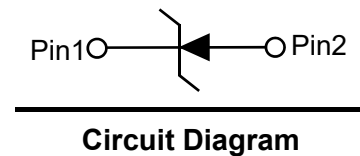


Feature

- 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

- Package: SMC
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.22g / 0.0077oz

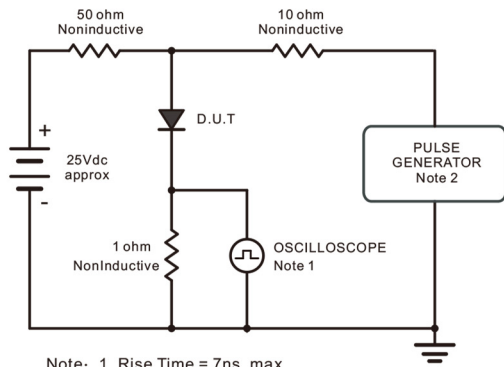

Absolute maximum rating@25°C

Parameter	Symbol	PES3 AC	PES3 BC	PES3 CC	PES3 DC	PES3 EC	PES3 GC	PES3 JC	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 $T_c = 125^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	90							A
Maximum Forward Voltage at 3.0 A	V_F	1.0				1.25		1.68	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	I_R					5.0 100			μA
Typical Junction Capacitance ¹⁾	C_J					40			pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$ $R_{\theta JC}$					40 16			$^\circ\text{C}/\text{W}$
Maximum Reverse Recovery Time ³⁾	t_{rr}					35			ns
Operating and Storage Temperature Range	T_J, T_{STG}					-55~+150			$^\circ\text{C}$

Notes:

- 1) Measured at 1 MHz and applied reverse voltage of 4 V D.C
- 2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.
- 3) Measured with $I = 0.5\text{ A}$, $I = 1\text{ A}$, $I = 0.25\text{ A}$.

Typical Characteristics



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

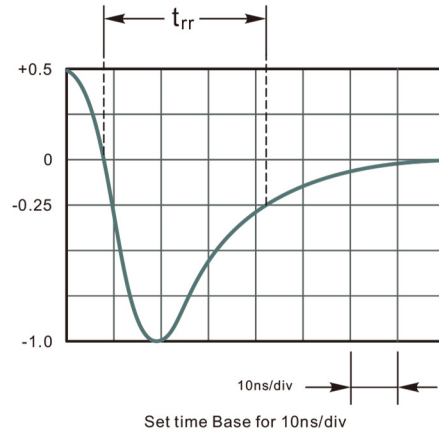


Fig. 1 Reverse Recovery Time Characteristic And Test Circuit Diagram

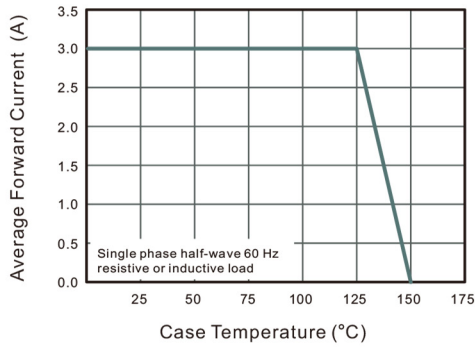


Fig.2 Maximum Average Forward Current Rating

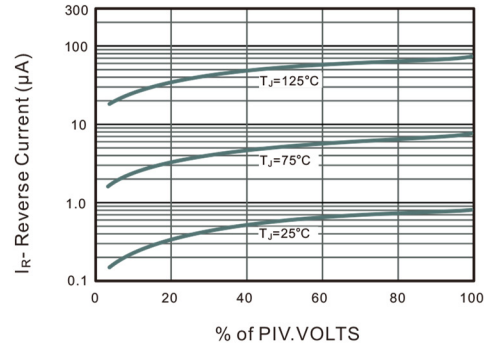


Fig.3 Typical Reverse Characteristics

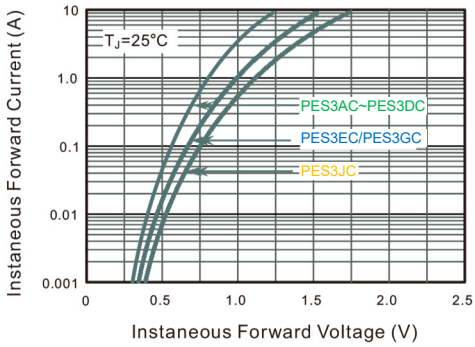


Fig.4 Typical Forward Characteristics

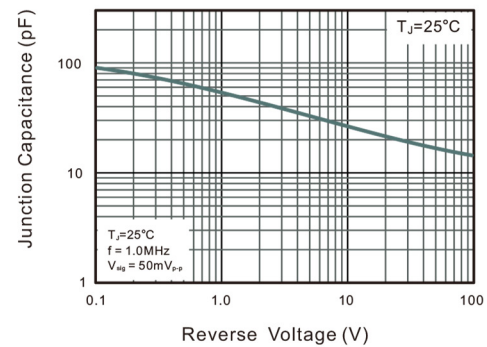


Fig.5 Typical Junction Capacitance

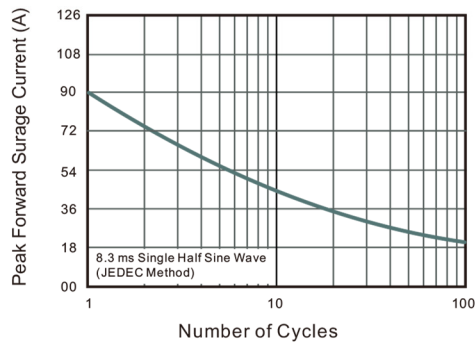
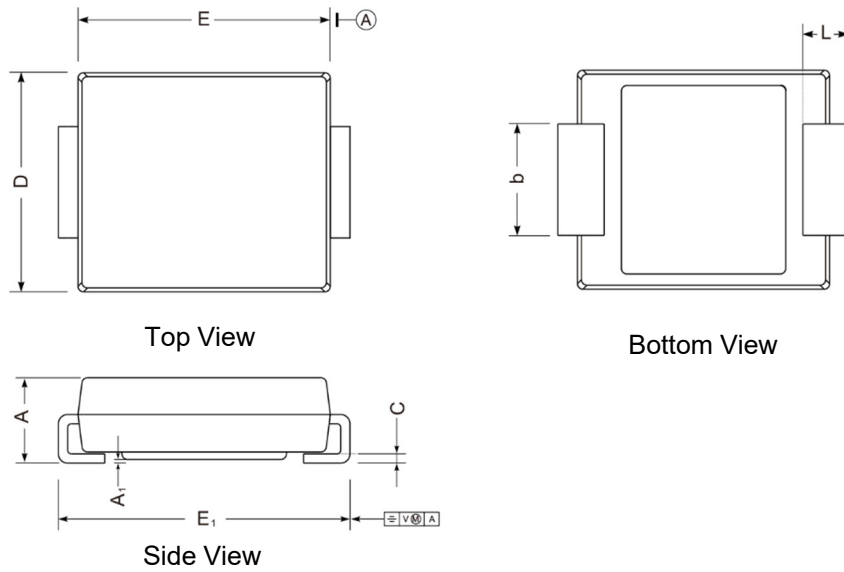
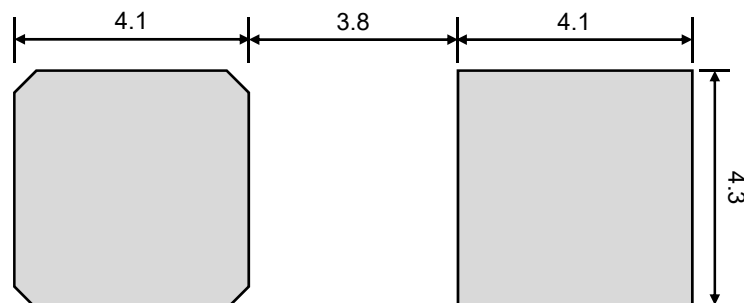


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current

Product dimension (SMC)




Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	2.00	2.62	0.079	0.103
E	6.50	7.00	0.256	0.276
D	5.60	6.20	0.220	0.244
E_1	7.50	8.00	0.299	0.315
A_1	0.05	0.21	0.002	0.008
C	0.15	0.31	0.006	0.012
L	0.90	1.60	0.035	0.063
b	2.75	3.25	0.108	0.128



Suggested PCB Layout

Unit:mm


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