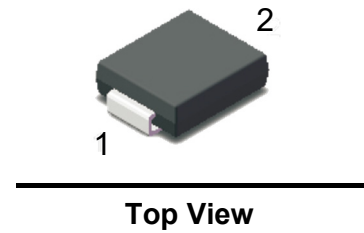
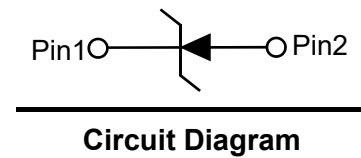


Feature

- 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	PES5 AC	PES5 BC	PES5 CC	PES5 DC	PES5 EC	PES5 GC	PES5 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 $T_c = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	5.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	120							A
Maximum Forward Voltage at 5.0 A	V_F	1.0				1.25		1.68	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ }^\circ\text{C}$ $T_a = 125\text{ }^\circ\text{C}$	I_R	5.0 100							μA
Typical Junction Capacitance ¹⁾	C_J	50							pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$ $R_{\theta JC}$	35 13							$^\circ\text{C/W}$
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

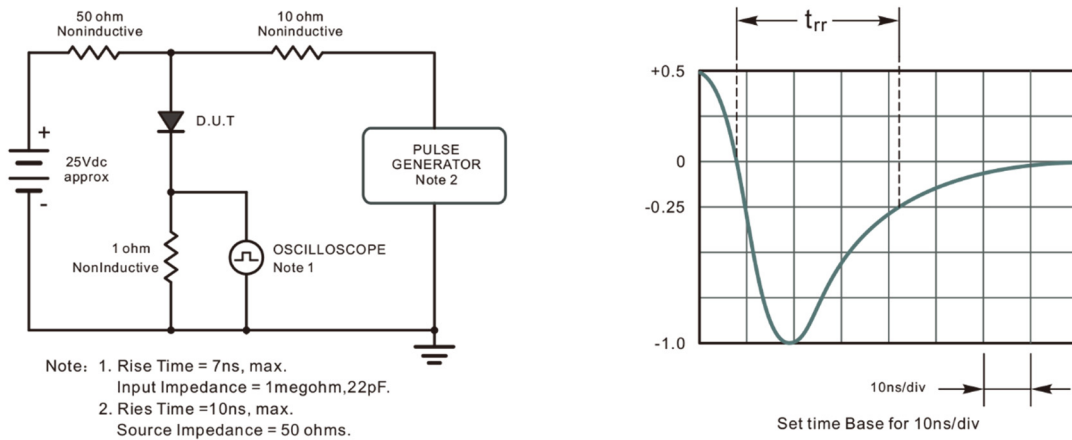


Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram

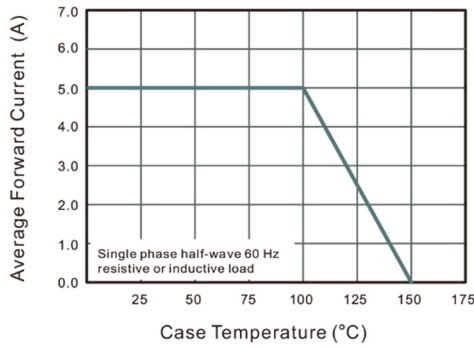


Fig.2 Maximum Average Forward Current Rating

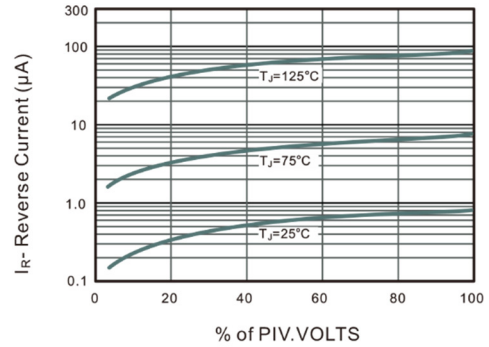


Fig.3 Typical Reverse Characteristics

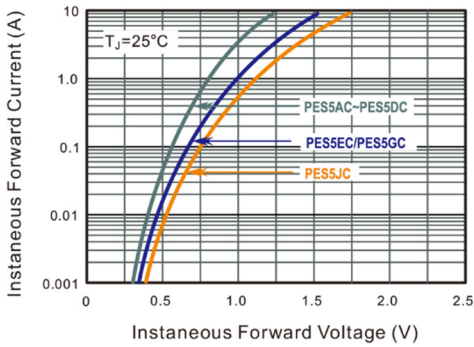


Fig.4 Typical Forward Characteristics

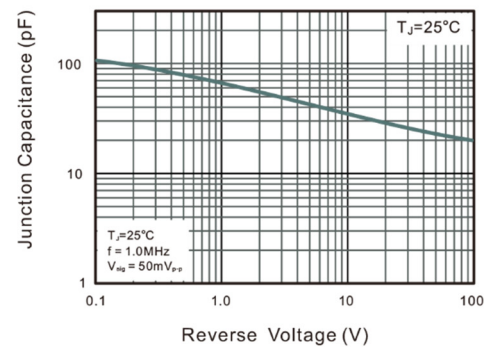


Fig.5 Typical Junction Capacitance

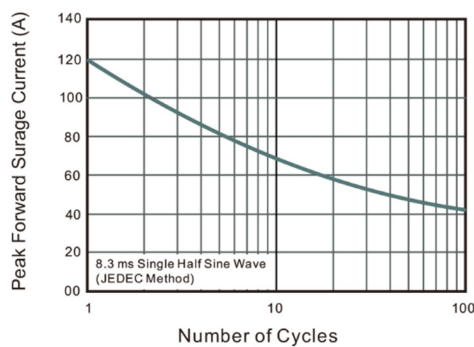
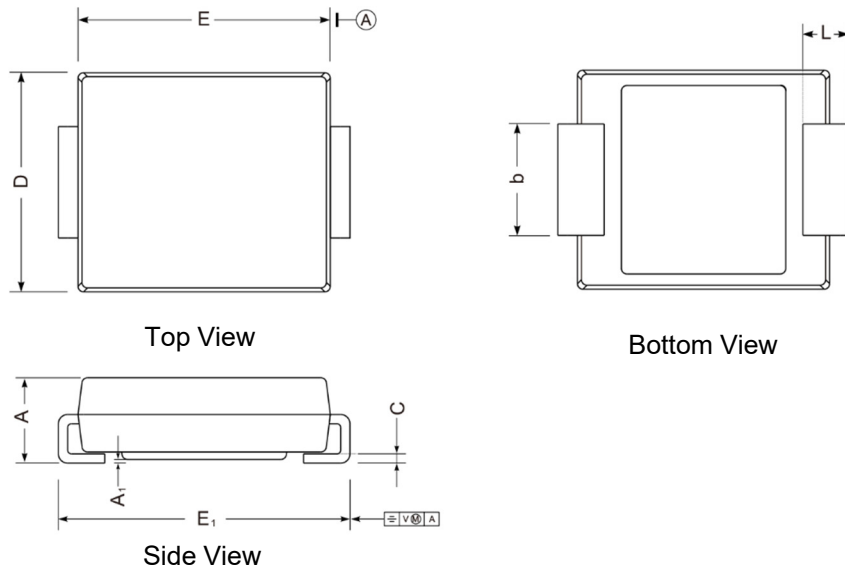
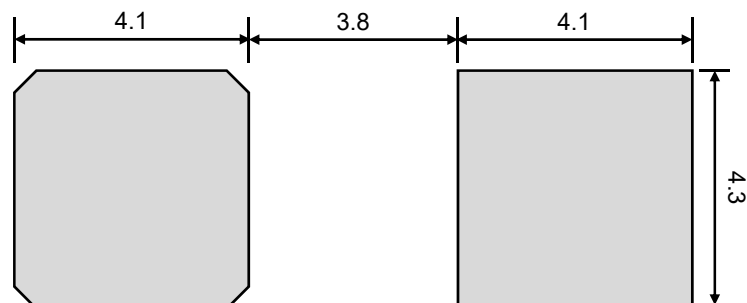


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current

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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