



PMEG6010ER

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 60V Forward Current - 1.0A

Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Marking:BB

Absolute Maximum Ratings and Electrical characteristics

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

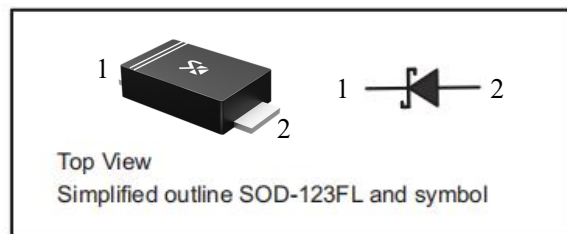
Parameter		Symbol	Limit	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	60	V
Maximum RMS voltage		V_{RMS}	42	V
Maximum DC Blocking Voltage		V_{DC}	60	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	1.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	40	A
Max Instantaneous Forward Voltage at 1 A		V_F	0.70	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	$T_A=25^{\circ}C$	I_R	0.3	mA
	$T_A=100^{\circ}C$		10	mA
Typical Junction Capacitance ⁽¹⁾		C_J	80	pF
Typical Thermal Resistance ⁽²⁾		$R_{\theta JA}$	115	°C/W
Operating Junction Temperature Range		T_J	-55~+125	°C
Storage Temperature Range		T_{STG}	-55~+150	°C

(1) Measured at 1MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 0.2 x 0.2" (5 x 5 mm) copper pad areas.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode





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Typical Characteristics

Fig.1 Forward Current Derating Curve

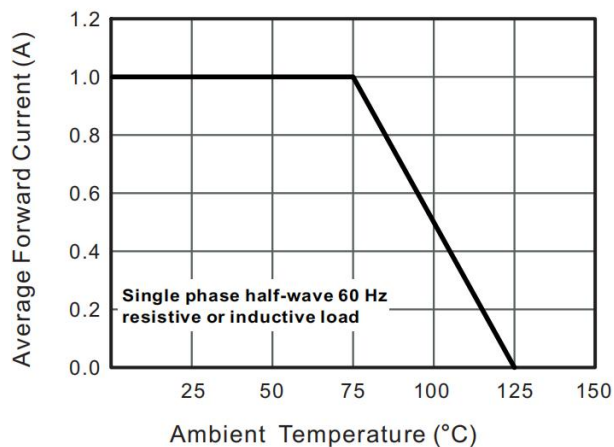


Fig.2 Typical Reverse Characteristics

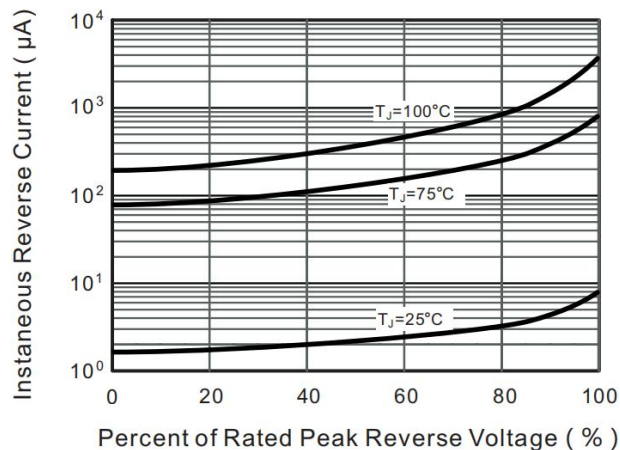


Fig.3 Typical Forward Characteristic

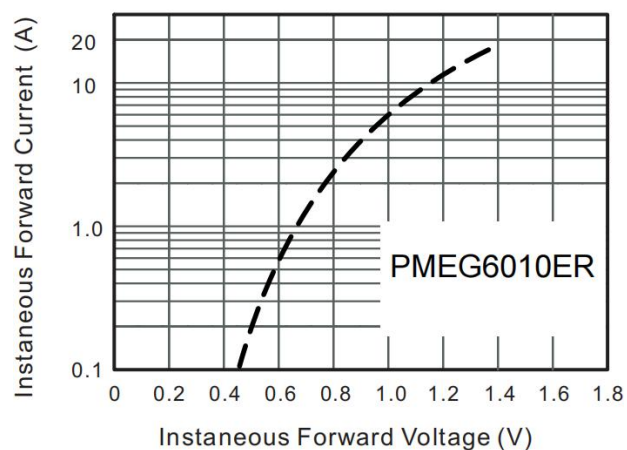


Fig.4 Typical Junction Capacitance

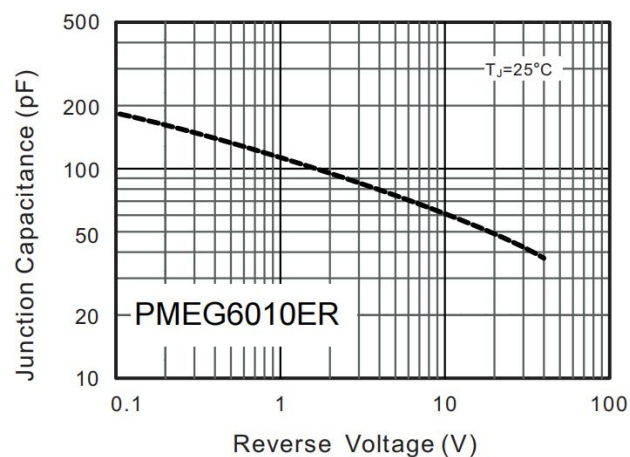


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

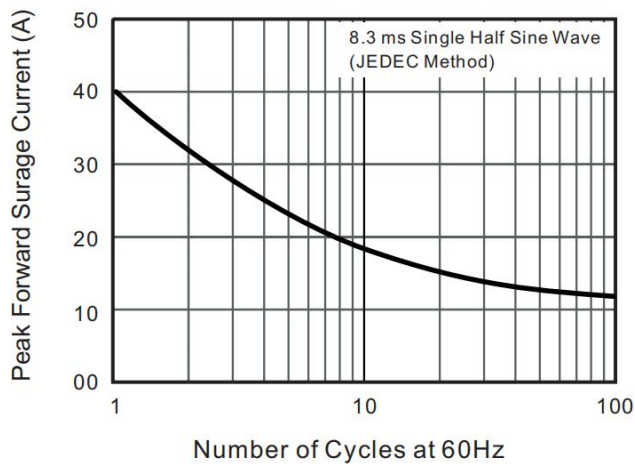
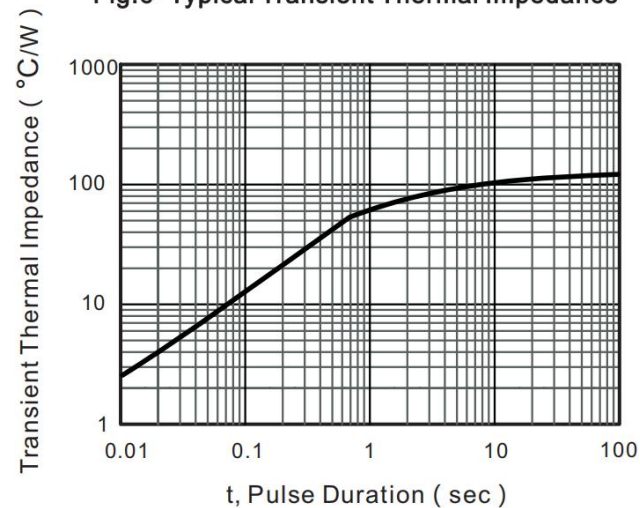


Fig.6- Typical Transient Thermal Impedance



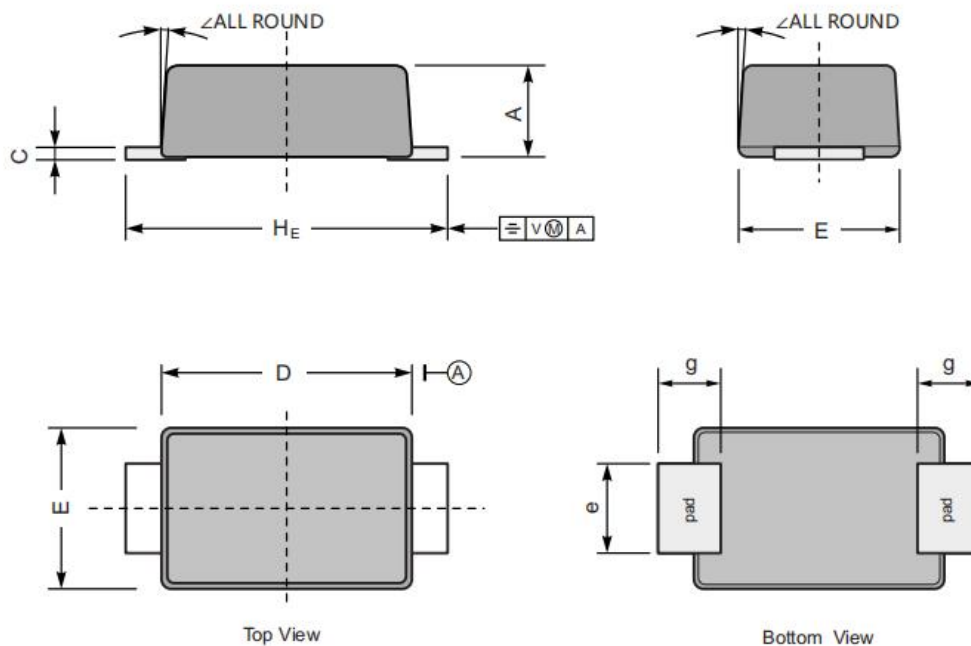


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Package Information

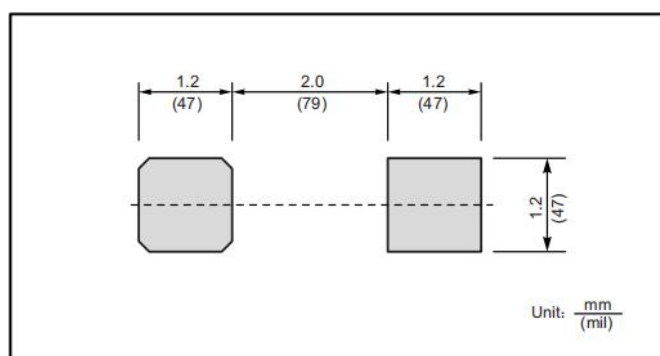
SOD-123FL

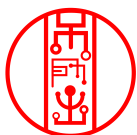
Dimensions in mm



UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

The recommended mounting pad size





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