

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

PMEG4005EGWX-MS

Product specification

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40V

Forward Current - 500mA

FEATURE

- 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

MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 15mg 0.00048oz

Reference News

SOD-123FL	Pin Configuration	MARKING
		

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	PMEG4005EGWX-MS	Units
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
RMS reverse voltage reverse voltage (DC)	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Current at $T_a = 25^{\circ}C$	I_o	0.5	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	22	A
Maximum Instantaneous Forward Voltage $I_F = 0.1A$ $I_F = 0.5A$ $I_F = 1A$	V_F	— 0.51 0.62	V
Reverse current $V_R = 10V$ $V_R = 15V$ $V_R = 20V$ $V_R = 30V$ $V_R = 40V$	I_R	— — 10 - 20	uA
Thermal Resistance , Junction to Ambient Air	$R_{\theta JA}$	500	$^{\circ}C/W$
Junction temperature	T_j	-55 ~ +125	$^{\circ}C$
Storage temperature	T_{stg}	-55 ~ +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS CURVE

Fig.1 Forward Current Derating Curve

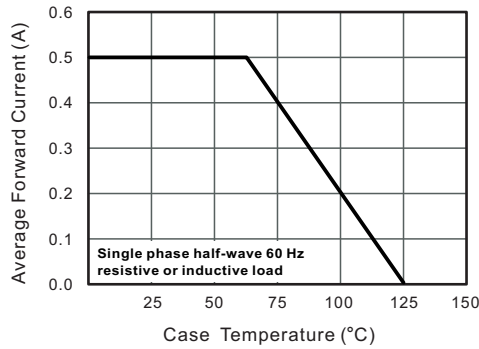


Fig.2 Typical Reverse Characteristics

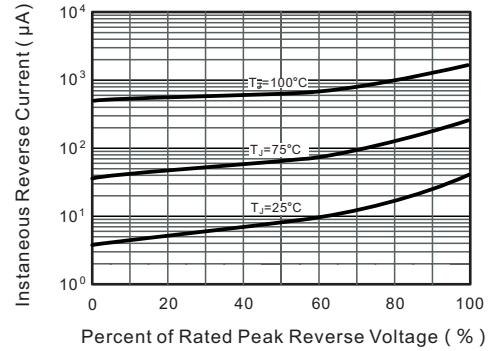


Fig.3 TYPICAL FORWARD VOLTAGE

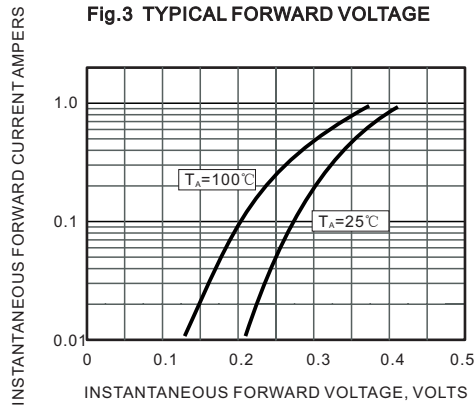


Fig.4 Typical Junction Capacitance

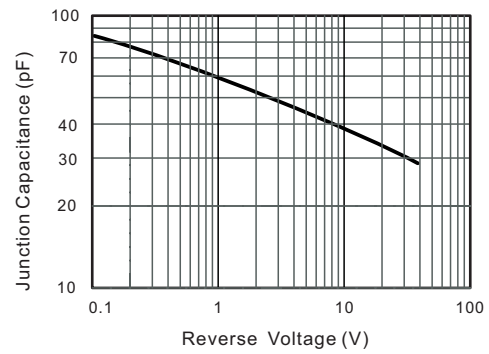


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

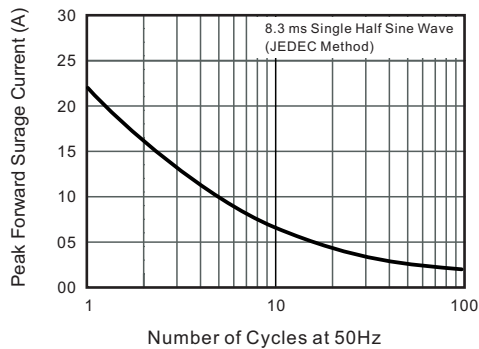
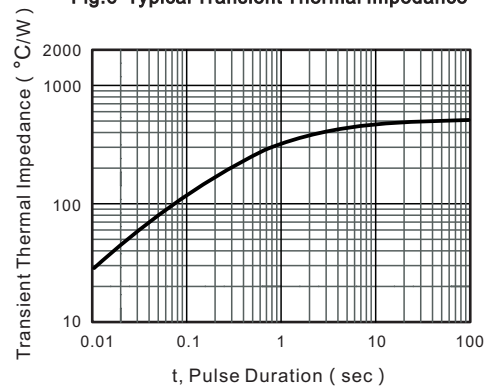
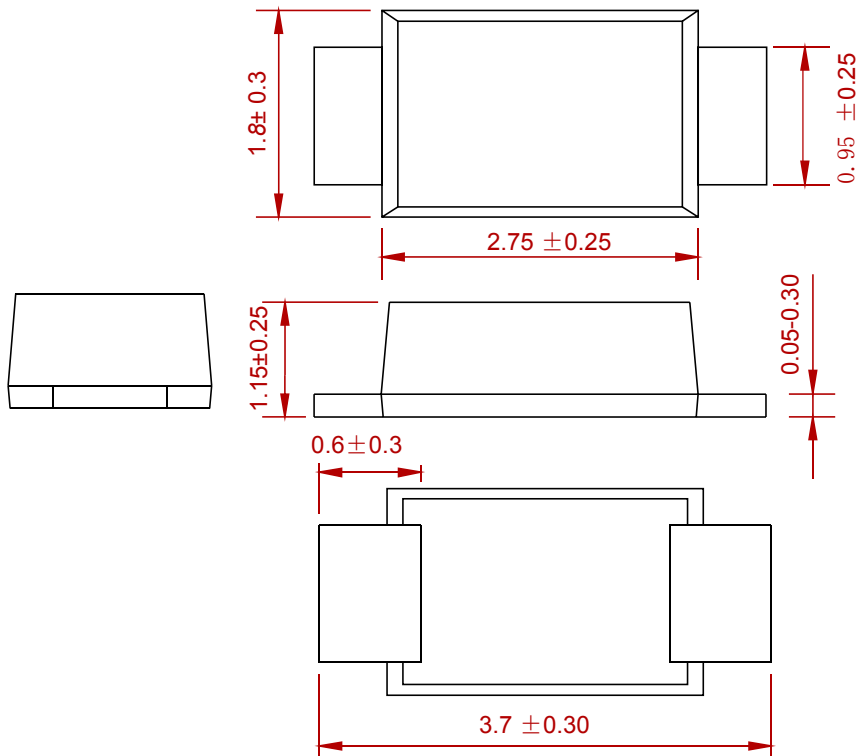


Fig.6 Typical Transient Thermal Impedance

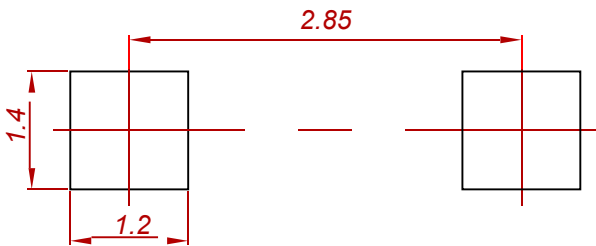


PACKAGE MECHANICAL DATA



Dimensions in millimeters

Suggested Pad Layout



Note:
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
PMEG4005EGWX-MS	SOD-123FL	3000

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