

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## PMEG3005EGWX-MS

Product specification

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 30V

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

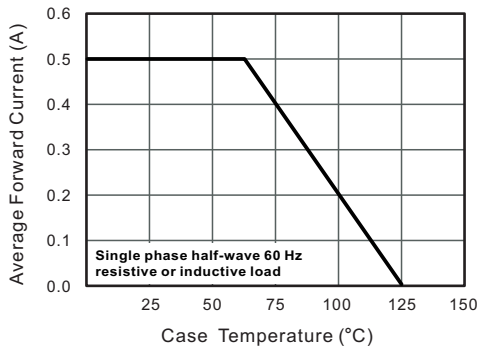
## Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

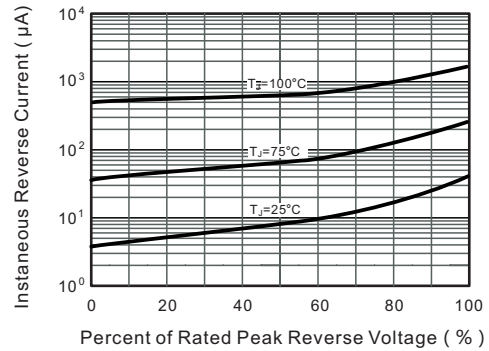
Parameter	Symbols	PMEG3005EGWX-MS	Units
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
RMS reverse voltage reverse voltage ( DC)	$V_{RMS}$	21	V
Maximum DC Blocking Voltage	$V_{DC}$	30	V
Maximum Average Forward Current at $T_a = 25^{\circ}C$	$I_o$	0.5	A
Peak Forward Surge Current , 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	22	A
Maximum Instantaneous Forward Voltage $I_F = 0.1A$ $I_F = 0.5A$ $I_F = 1A$	$V_F$	0.36 0.45 —	V
Reverse current $V_R = 10V$ $V_R = 15V$ $V_R = 20V$ $V_R = 30V$ $V_R = 40V$	$I_R$	— 75 100 500 —	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

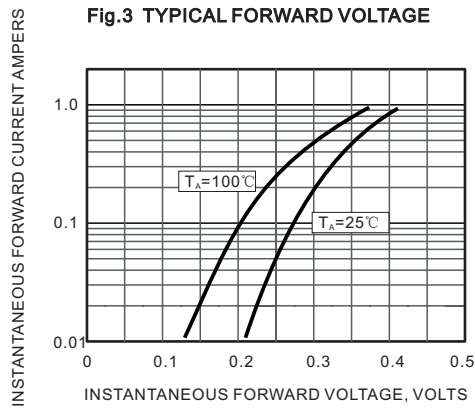
**Fig.1 Forward Current Derating Curve**



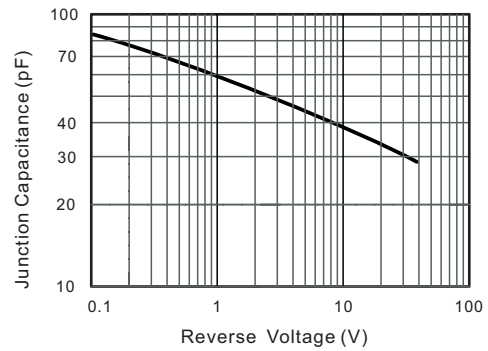
**Fig.2 Typical Reverse Characteristics**



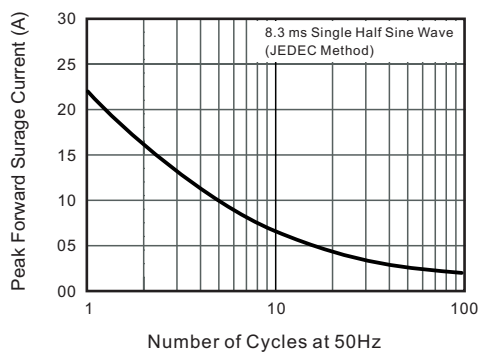
**Fig.3 TYPICAL FORWARD VOLTAGE**



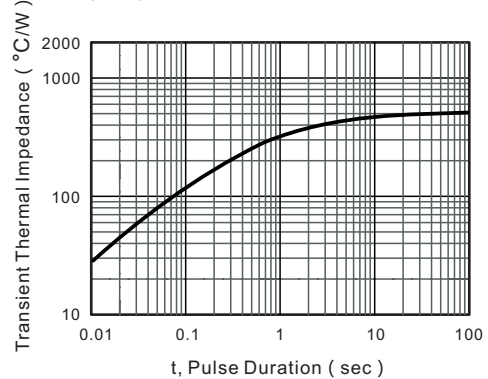
**Fig.4 Typical Junction Capacitance**



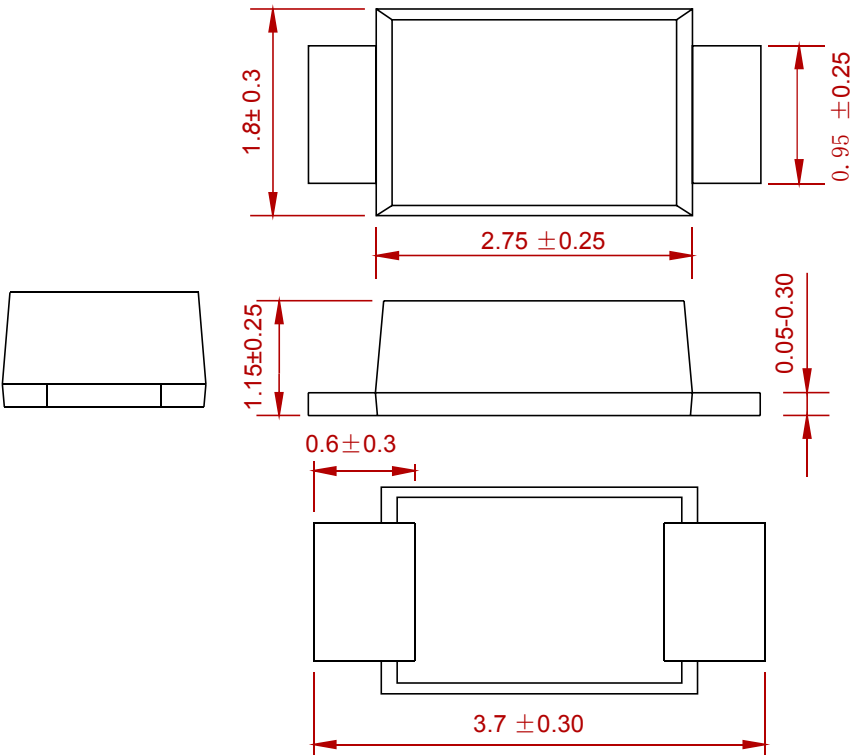
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6 Typical Transient Thermal Impedance**

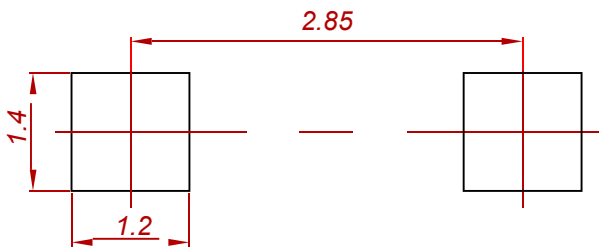


PACKAGE MECHANICAL DATA



Dimensions in millimeters

Suggested Pad Layout



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

REEL SPECIFICATION

P/N	PKG	QTY
PMEG3005EGWX-MS	SOD-123FL	3000

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