

# MSKSEMI 美森科

SEMICONDUCTOR



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## PMEG4020ETR-MS

Product specification

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40V

Forward Current - 2.0 A




## 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

## Absolute Maximum Ratings and Electrical characteristics

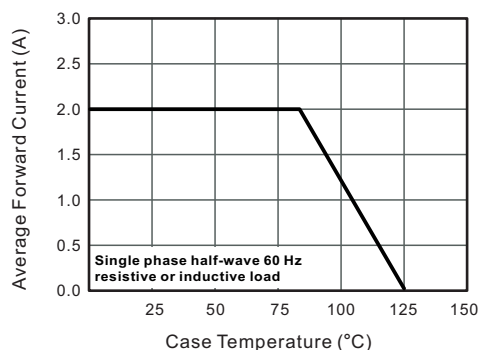
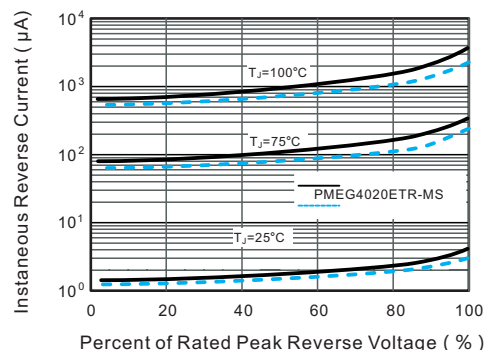
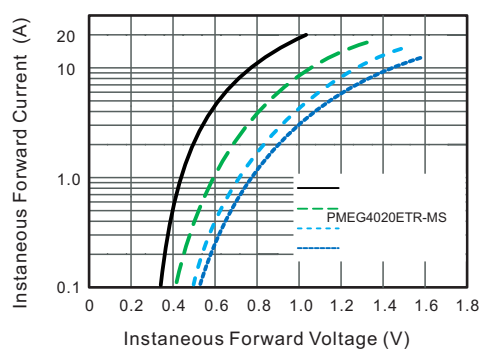
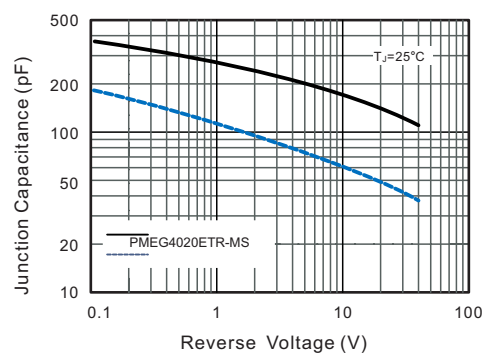
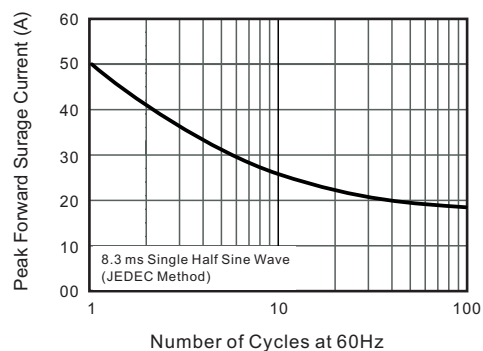
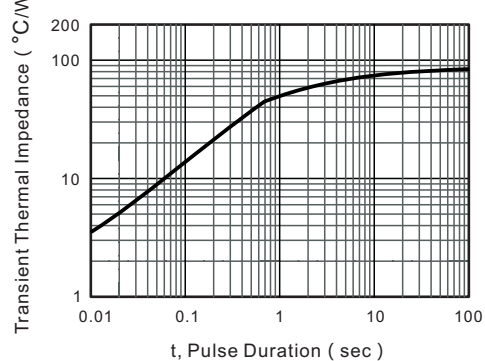
Ratings at 25℃ ambient temperature unless otherwise specified.Single phase , half wave , 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	PMEG4020ETR-MS	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
Maximum RMS voltage	$V_{RMS}$	28	V
Maximum DC Blocking Voltage	$V_{DC}$	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current ,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50	A
Max Instantaneous Forward Voltage at 2 A	$V_F$	0.55	V
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Reverse Voltage $T_a = 100^{\circ}C$	$I_R$	0.5 5	mA
Typical Junction Capacitance ( 1 )	$C_j$	220	pF
Typical Thermal Resistance ( 2 )	$R_{\theta JA}$	85	℃/W
Operating Junction Temperature Range	$T_j$	-55 ~ +125	℃
Storage Temperature Range	$T_{stg}$	-55 ~ +150	℃

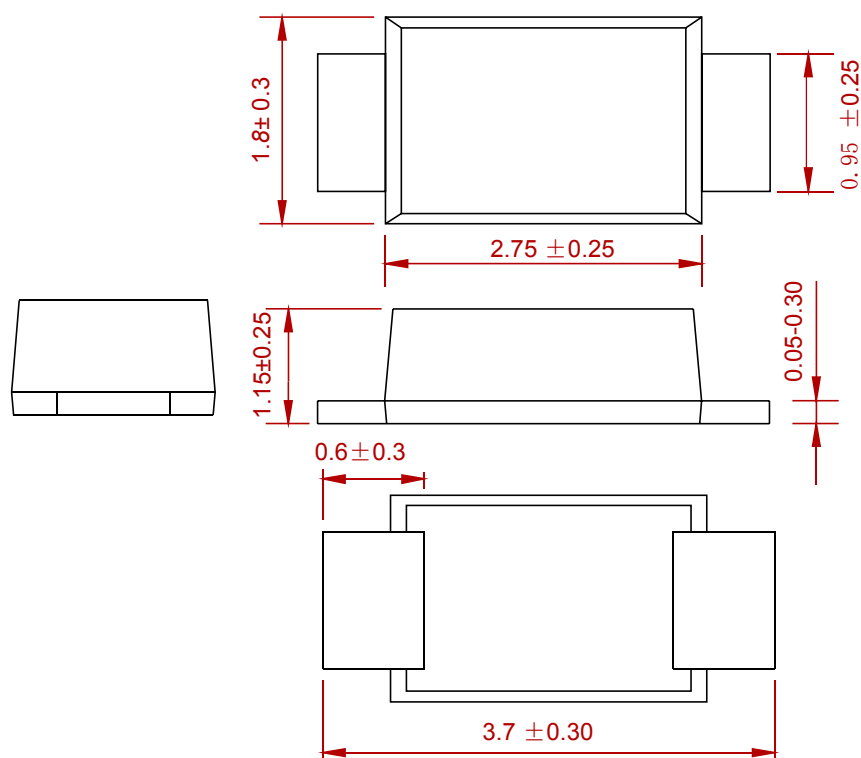
( 1 ) Measured at 1 MHz and applied reverse voltage of 4 V D.C

( 2 ) P.C.B . mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas .

# ELECTRICAL CHARACTERISTICS CURVE

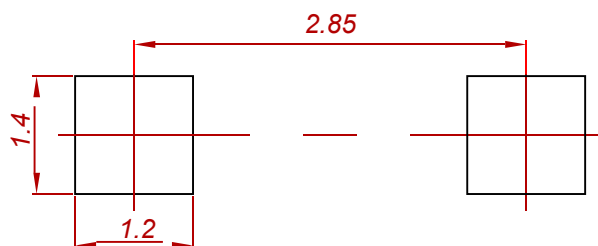
**Fig.1 Forward Current Derating Curve**

**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**


## 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
PMEG4020ETR-MS	SOD-123FL	3000

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