

## 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



SOD-128

## Mechanical data

- Case: SOD-128
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg / 0.00095oz

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

## 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	Symbols	PMEG6030EVPX-JSM		Units
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	$I_{F(AV)}$	3.0		A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80		A
Max Instantaneous Forward Voltage at 3 A	$V_F$	0.70		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 <sup>(1)</sup>	$C_J$	250		pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$ $R_{\theta JC}$	70 18		°C/W
Operating Junction Temperature Range	$T_J$	-55 ~ +125		°C
Storage Temperature Range	$T_{stg}$	-55 ~ +150		°C

( 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.

Fig.1 Forward Current Derating Curve

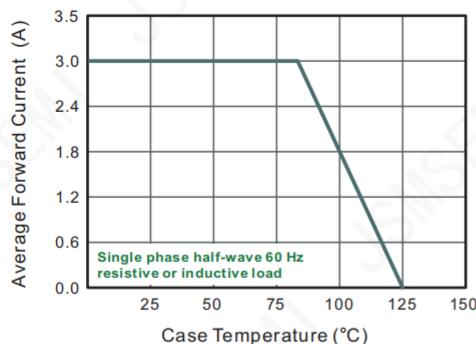


Fig.2 Typical Reverse Characteristics

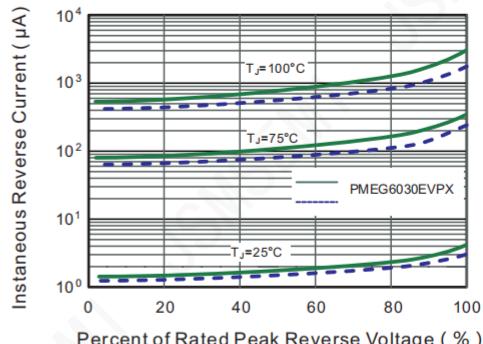


Fig.3 Typical Forward Characteristic

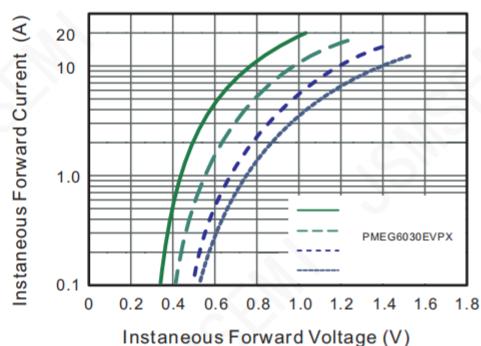


Fig.4 Typical Junction Capacitance

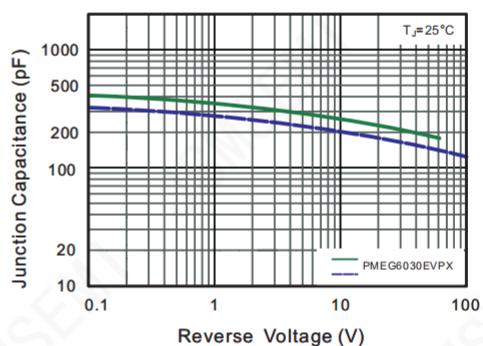


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

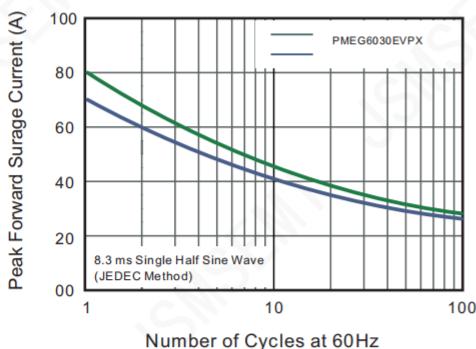
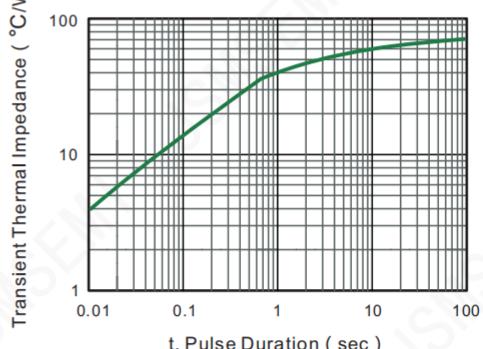


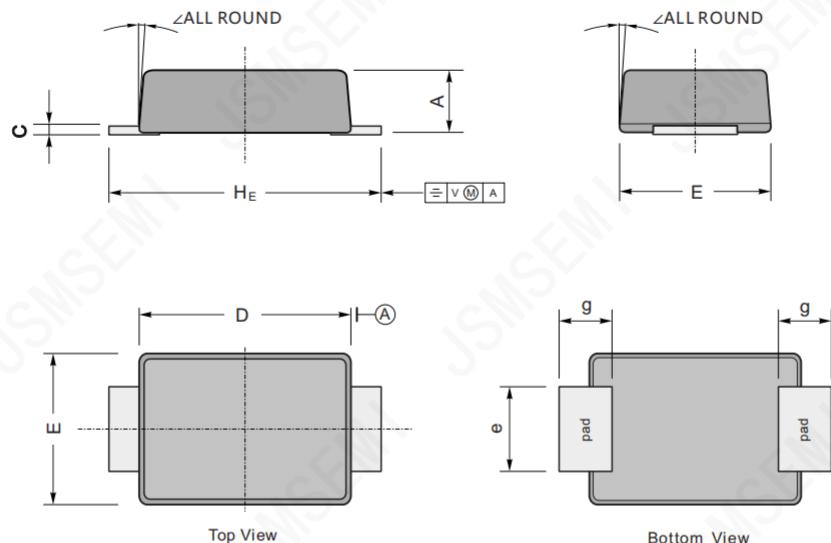
Fig.5- Typical Transient Thermal Impedance



**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

SOD-128



UNIT		A	C	D	E	e	g	H_E	<
mm	max	1.2	0.20	3.7	2.7	1.6	1.2	4.9	7°
	min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	max	47	7.9	146	106	63	47	193	7°
	min	35	4.7	130	94	51	31	173	

## Revision History

Rev.	Change	Date
V1.0	Initial version	6/27/2021

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