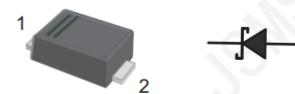


FEATURES

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


MECHANICAL DATA

- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.095g / 0.003oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

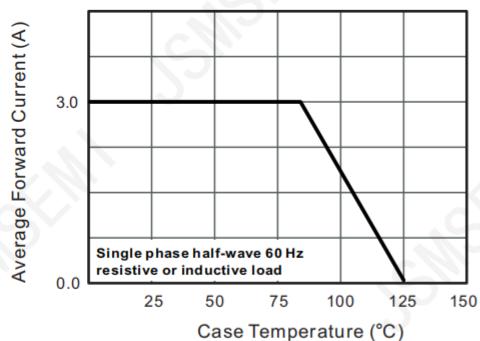
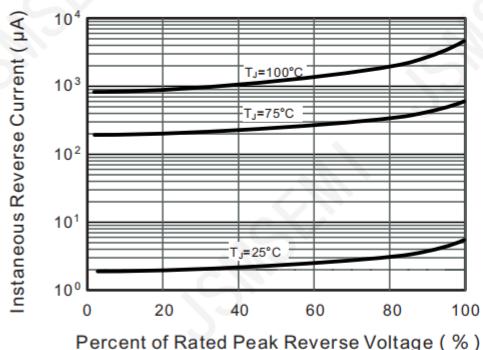
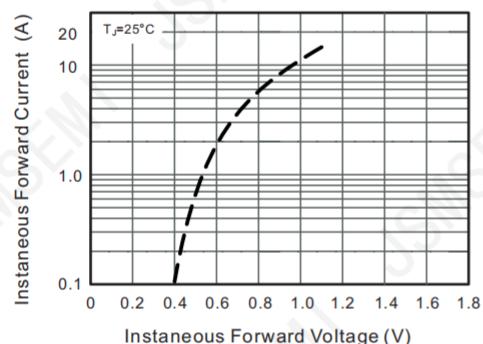
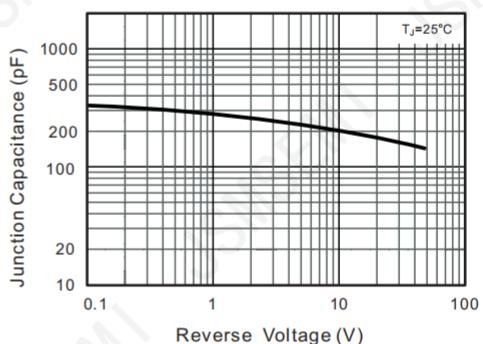
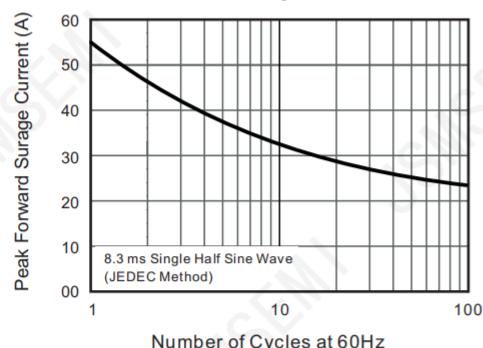
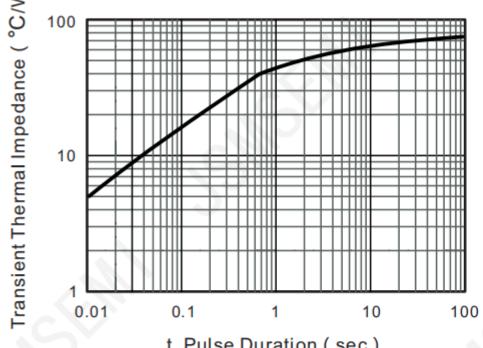
Absolute Maximum Ratings and Electrical characteristics

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	PMEG3030EP,115-JSM	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Maximum RMS voltage	V_{RMS}	42	V
Maximum DC Blocking Voltage	V_{DC}	30	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}	55	A
Max Instantaneous Forward Voltage at 2 A	V_F	0.70	V
Maximum DC Reverse Current at $T_a = 25^\circ C$ Rated DC Reverse Voltage $T_a=100^\circ C$	I_R	0.55	mA
Typical Junction Capacitance ⁽¹⁾	C_j	220	pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	60	°C/W
Operating Junction Temperature Range	T_j	-55 ~ +125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

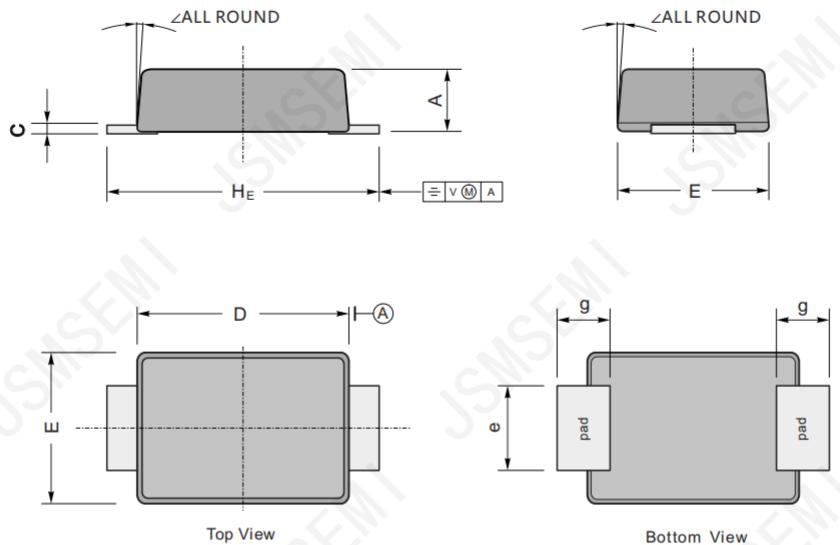
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(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.6- Typical Transient Thermal Impedance


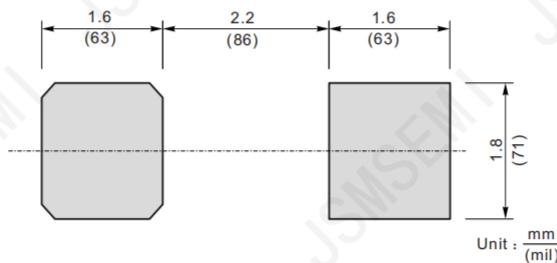
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD128


UNIT		A	C	D	E	e	g	H _E	α
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	

The recommended mounting pad size



Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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