

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction,majority carrier conduction
- ◆ Low power loss,high efficiency
- ◆ Built-in strain relief,ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:260 °C/10 seconds at terminals
- ◆ Compliant to RoHS 2.0
- ◆ Compliant to Halogen-free



SOD-128

Mechanical data

- ◆ **Case:** JEDEC SOD-128 molded plastic body
- ◆ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ◆ **Polarity:** Color band denotes cathode end
- ◆ **Mounting Position:** Any

Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

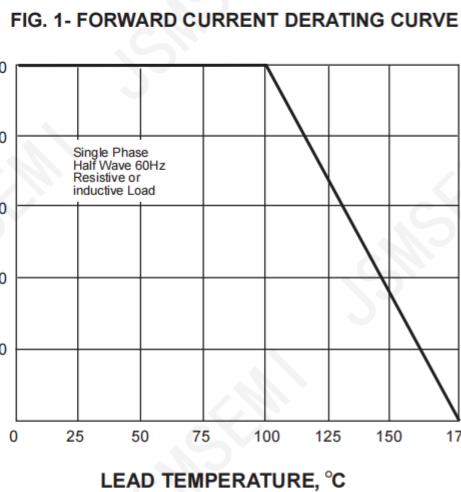
PARAMETER	SYMBOLS	PMEG10030ELPX-JSM		UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100		V
Maximum RMS voltage	V_{RMS}	70		V
Maximum DC blocking voltage	V_{DC}	100		V
Maximum average forward rectified current at T_L (see fig.1)	$I_{(AV)}$	3.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100		A
Maximum instantaneous forward voltage at 3.0A	V_F	0.77		V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	0.05	1.50	mA
Typical junction capacitance (NOTE 1)	C_J	360		
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	60		C/W
Operating junction temperature range	T_J	-55 to +175		C
Storage temperature range	T_{STG}	-55 to +175		C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

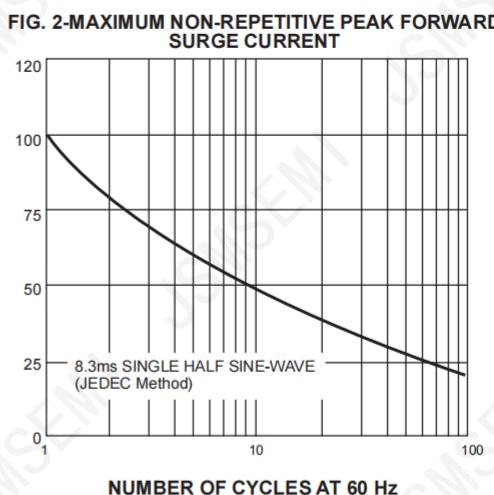
2. P.C.B. mounted with 2.0x2.0"(5.0x5.0cm) copper pad areas

Rating and characteristic curves

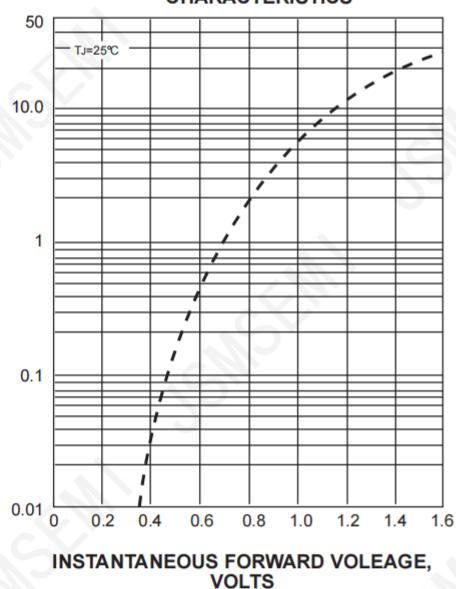
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



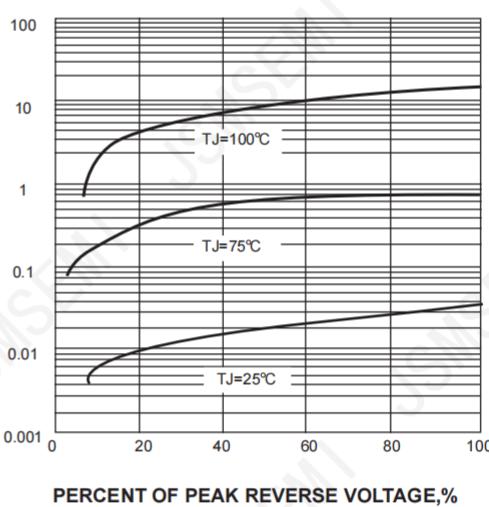
PEAK FORWARD SURGE CURRENT, AMPERES



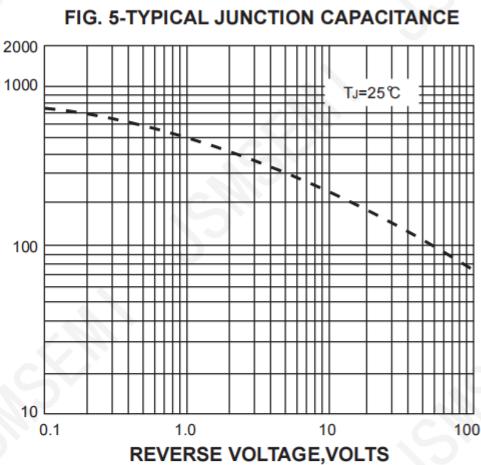
INSTANTANEOUS FORWARD CURRENT, AMPERES



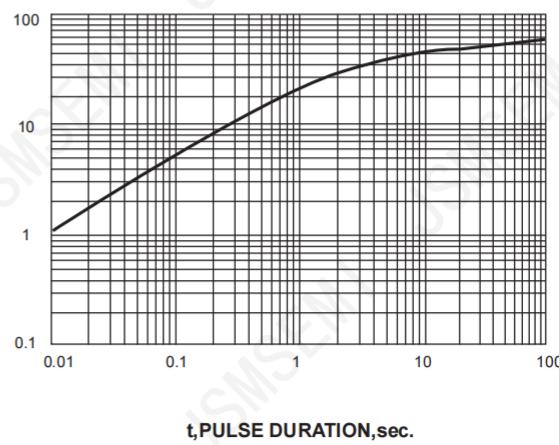
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF

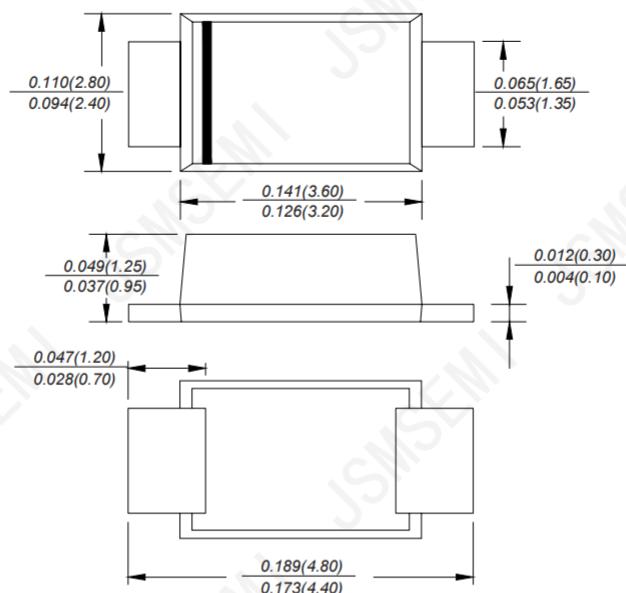


TRANSIENT THERMAL IMPEDANCE, °C/W



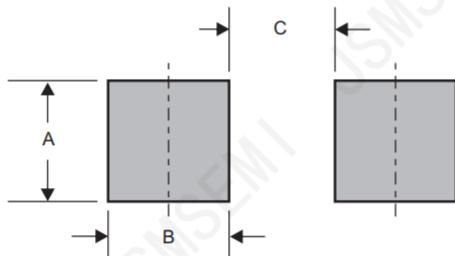
Package outline

SOD-128



Dimensions in inches and (millimeters)

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-128	0.110 (2.80)	0.063 (1.60)	0.087 (2.20)

Revision History

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

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