

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



Top View
Simplified outline DO-221AC and symbol

MECHANICAL DATA

- Case: SOD-123FL

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Absolute Maximum Ratings and Electrical characteristics

Parameter	Symbols	PMEG6020ER,115-JSM	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	60	V
Maximum RMS voltage	VRMS	42	V
Maximum DC Blocking Voltage	VDC	60	V
Maximum Average Forward Rectified Current	IF(AV)	2.0	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	50	A
Max Instantaneous Forward Voltage at 2 A	VF	0.70	V
Maximum DC Reverse Current at Rated DC Reverse Voltage $T_a = 25^{\circ}\text{C}$ $T_a = 100^{\circ}\text{C}$	IR	0.55	mA
Typical Junction Capacitance (1)	Cj	80	pF
Typical Thermal Resistance (2)	RθJA	85	°C/W
Operating Junction Temperature Range	Tj	-55 ~ +150	°C
Storage Temperature Range	Tstg	-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

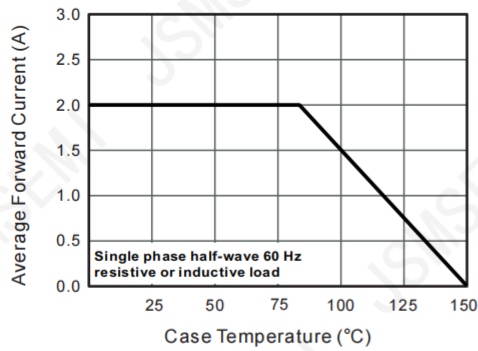


Fig.2 Typical Reverse Characteristics

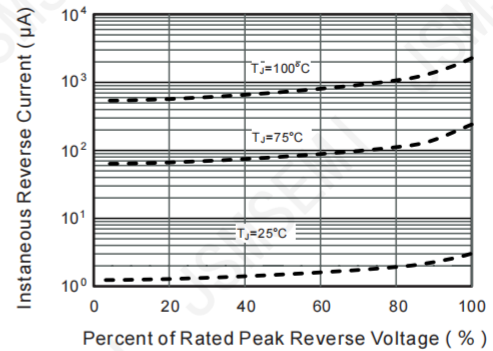


Fig.3 Typical Forward Characteristic

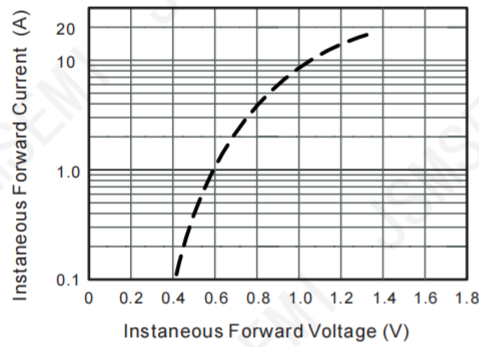


Fig.4 Typical Junction Capacitance

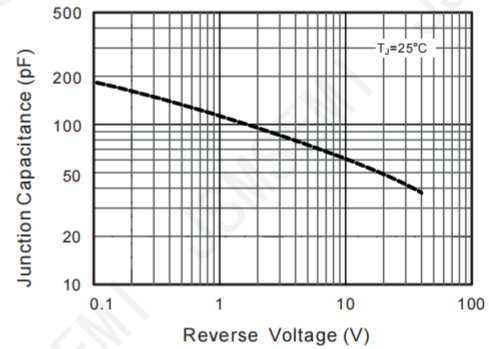


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

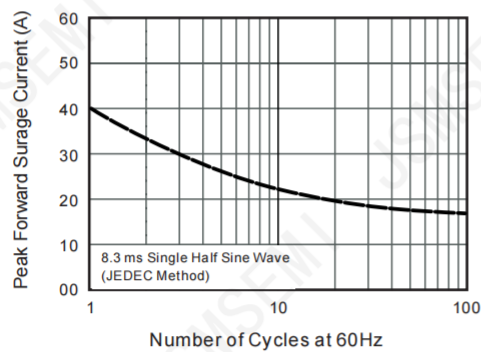
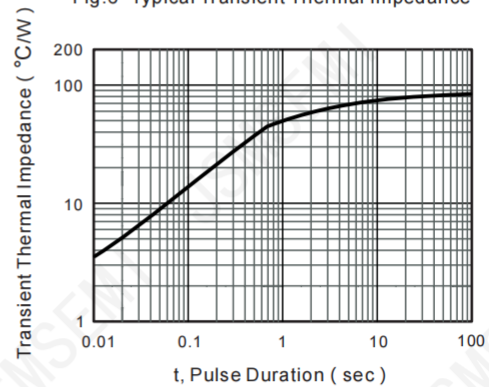


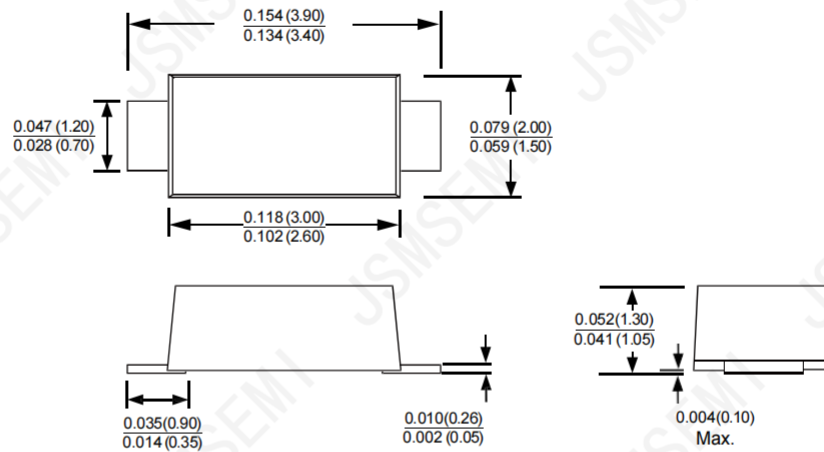
Fig.6- Typical Transient Thermal Impedance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



Mounting Pad Layout

