

FEATURES

- Extremely low V_F .
- Low stored charge, majority carrier conduction.
- Low power loss/high efficient.



APPLICATIONS

- For Use In Low Voltage, High Frequency Inverters.
- Free Wheeling, And Polarity Protection Applications.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	symbol	Value	Unit
Non-Repetitive Peak reverse voltage	V_{RSM}	24	V
Peak repetitive Peak reverse voltage	V_{RRM}		
Working Peak Reverse voltage	V_{RWM}	20	V
DC Reverse Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	14	V
Average Rectified output Current	I_o	1	A
Repetitive Peak Forward Current (At Rated VR, Square Wave, 100 kHz, TL = 95°C)	I_{FRM}	625	mA
Peak forward surge current@=8.3ms	I_{FSM}	10	A
Power Dissipation	P_d	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	150	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +100	$^\circ\text{C}$

Ordering Information

Order number	Package	Marking	Operation Temperature Range	MSL Grade	Ship, Quantity	Green
PMEG2010AEH,115-JSM	SOD-123	SJ	-65 to +100°C	3	T&R,3000	Rohs

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test Condition	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(\text{BR})}$	$I_R=1\text{mA}$	20		V
Reverse voltage leakage current	I_R	$V_R=20\text{V}$		1	mA
Forward voltage	V_F	$I_F=1\text{A}$ $I_F=3\text{A}$		0.50 0.75	V
Diode capacitance	C_D	$V_R=4\text{V}, f=1\text{MHz}$		120	pF

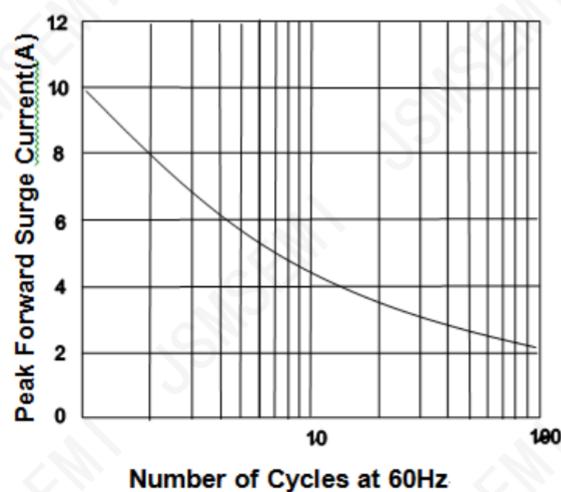
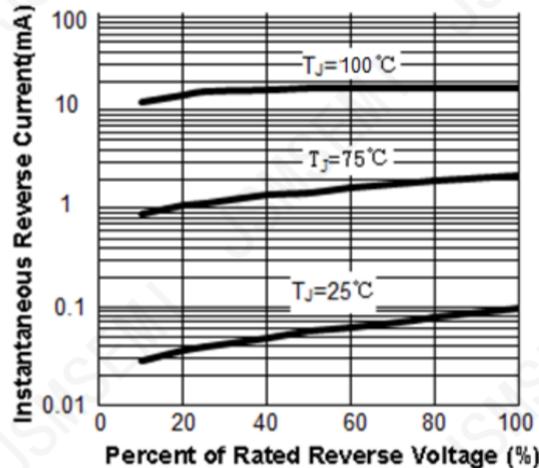
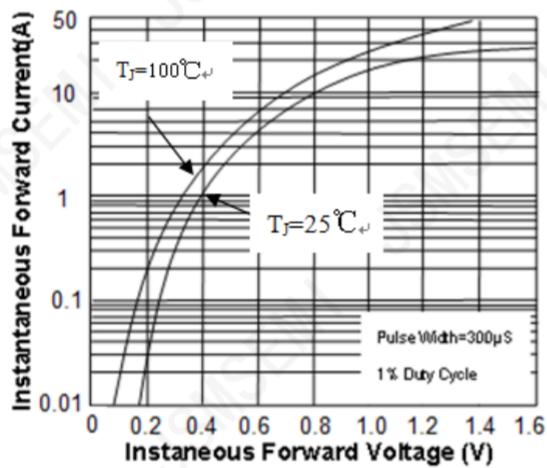
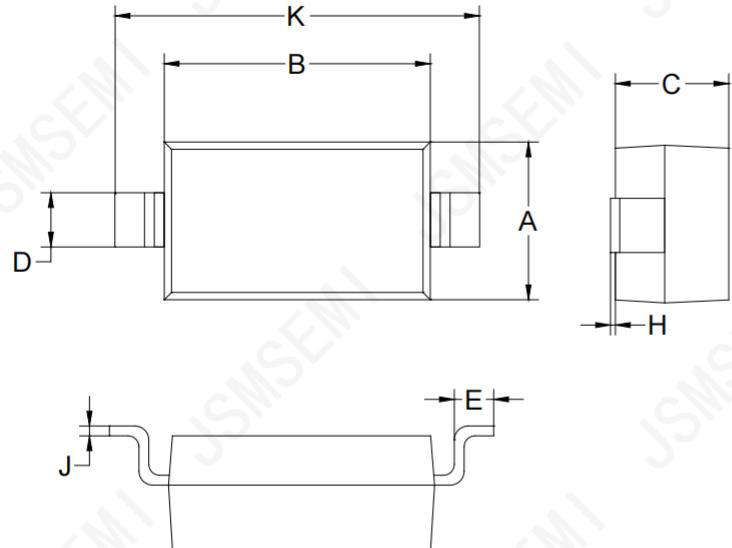
 TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified


Fig.3 Maximum Non-Repetitive Peak Forward Surge Current

PACKAGE OUTLINE

Plastic surface mounted package

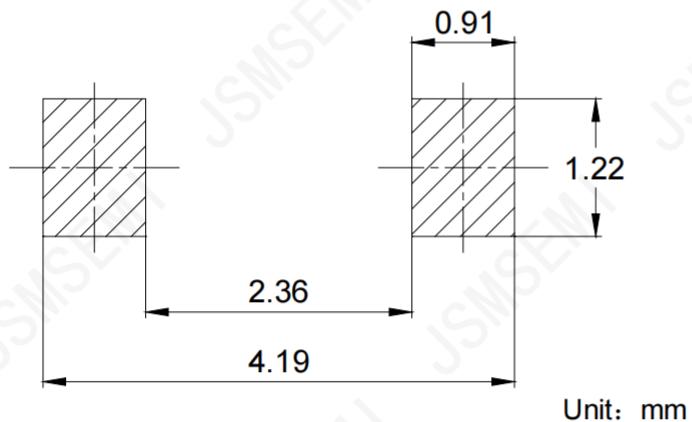
SOD-123



SOD-123		
Dim	Min	Max
A	1.45	1.75
B	2.55	2.85
C	1.00	1.30
D	0.50	0.60
E	0.25	0.45
H	0.02	0.10
J	0.05	0.15
K	3.55	3.85

All Dimensions in mm

SOLDERING FOOTPRINT



Revision History

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

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