

## Features

- Low reverse current and low forward voltage
- High reliability
- Small surface mounting type

## Typical Applications

- For general purpose applications

## Mechanical Data

- Molding compound, UL flammability classification rating 94V-0
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208



SOD-323



## Maximum Ratings (@T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	PMEG4010CEJ,115-JSM	Units
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	40	V
RMS Reverse Voltage	V <sub>RMS</sub>	28	V
Maximum Average Forward Output Current	I <sub>F(AV)</sub>	1	A
Peak Forward Surge Current,8.3ms Single Half-sine-wave	I <sub>FSM</sub>	10	A

## Thermal Characteristics

Parameter	Symbol	PMEG4010CEJ,15-JSM	Units
Power Dissipation	P <sub>D</sub>	250	mW
Typical Thermal Resistance per leg	R <sub>θJA</sub> *	400	°C /W
Operating Junction Temperature Range	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

\* Part mounted on FR-4 board with recommended pad layout

## Electrical Characteristics (@T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V <sub>F</sub> *	I <sub>F</sub> =1A			0.60	V
		I <sub>F</sub> =3A	-	-	0.90	
Maximum Peak Reverse Current	I <sub>R</sub> **	V <sub>R</sub> = 40V	-	-	1	mA
Capacitance Between Terminals	C <sub>T</sub>	V <sub>R</sub> =4V,f=1MHz	-	39	120	pF

\*Pulse width ≤380 uS, Duty cycle < 2%\*

\*pulse test , tp≤5ms

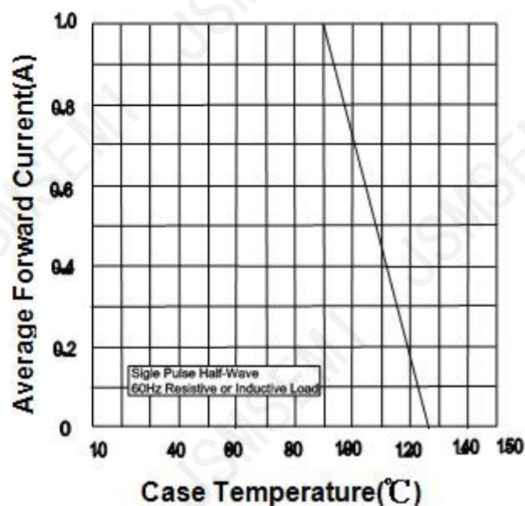
**Ratings and Characteristic Curves** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)


Fig.1 Forward Current Derating Curve

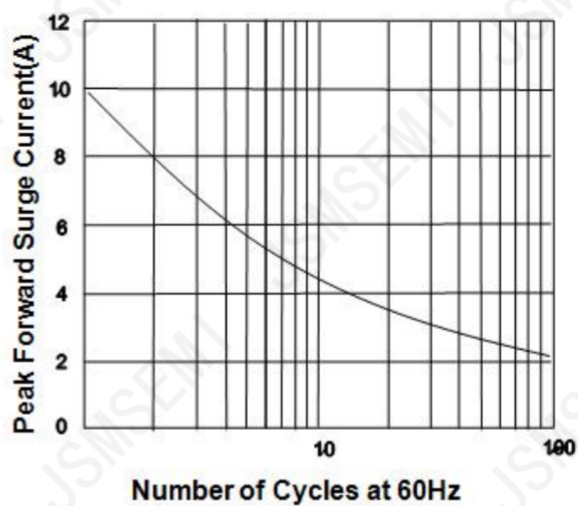


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

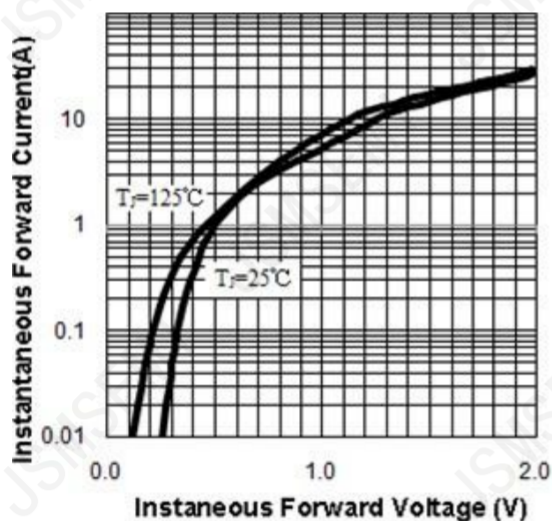


Fig.3 Typical Instantaneous Forward Characteristics

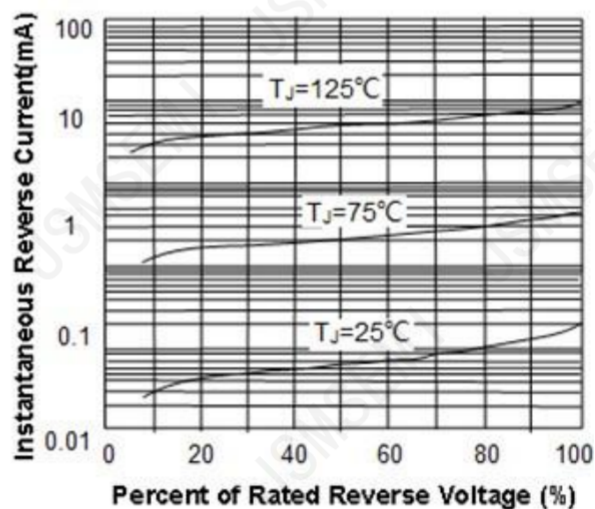
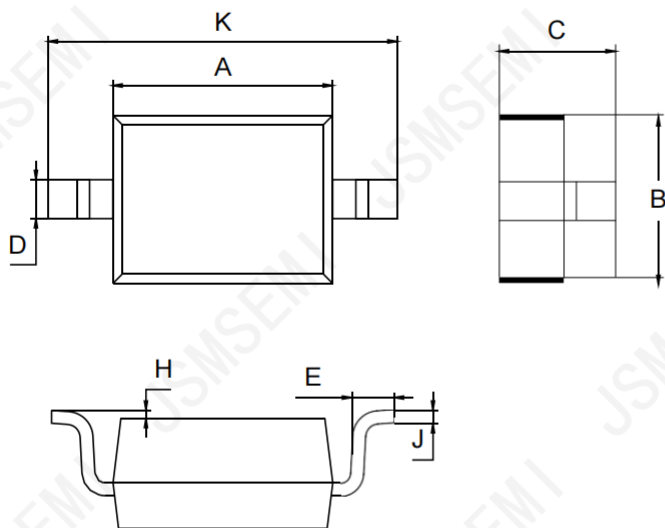


Fig.4 Typical Reverse Characteristics

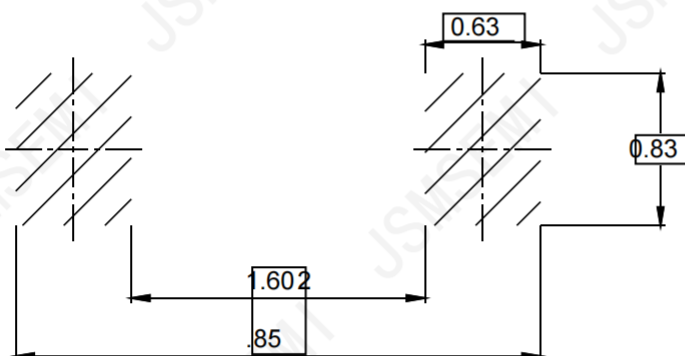
**Package Outline Dimensions** (unit: mm)

**SOD-323**



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

**Mounting Pad Layout** (unit: mm)



## Revision History

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

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