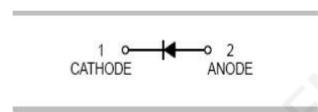


Features

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



SOD-323



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

Maximum Ratings (@ $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	PMEG3010BEA,115-JSM	Units
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
RMS Reverse Voltage	V_{RMS}	28	V
Maximum Average Forward Output Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current, 8.3ms Single Half-sine-wave	I_{FSM}	10	A

Thermal Characteristics

Parameter	Symbol	PMEG3010BEA,115-JSM	Units
Power Dissipation	P_D	250	mW
Typical Thermal Resistance per leg	$R_{\theta JA}^*$	400	°C /W
Operating Junction Temperature Range	T_J	125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

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

Electrical Characteristics (@ $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V_F^*	$I_F=1\text{A}$			0.60	V
		$I_F=3\text{A}$	-	-	0.90	
Maximum Peak Reverse Current	I_R^{**}	$V_R=40\text{V}$	-	-	1	mA
Capacitance Between Terminals	C_T	$V_R=4\text{V}, f=1\text{MHz}$	-	39	120	pF

Pulse width $\leq 380\text{ }\mu\text{s}$, Duty cycle $< 2\%$

**pulse test, $t_p \leq 5\text{ms}$

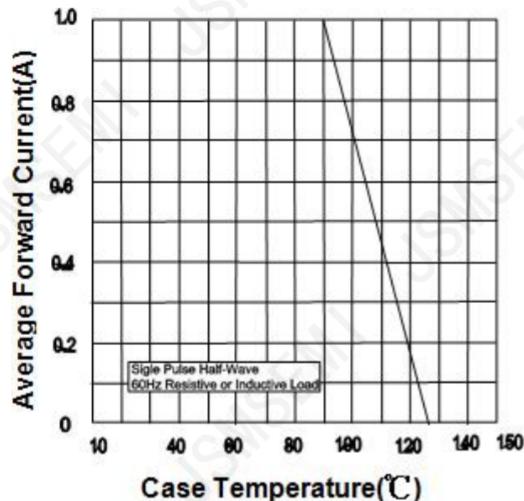
Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)


Fig.1 Forward Current Derating Curve

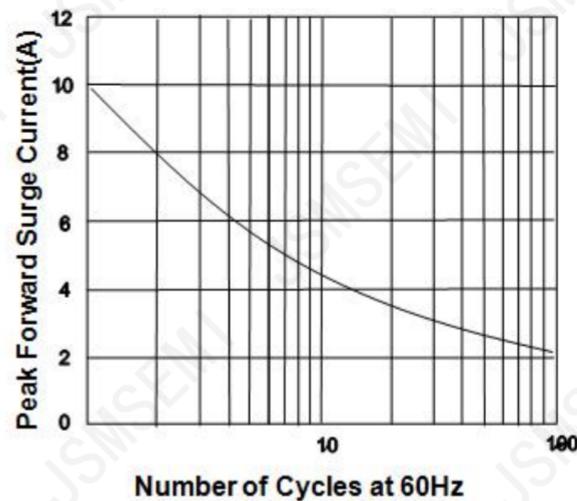


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

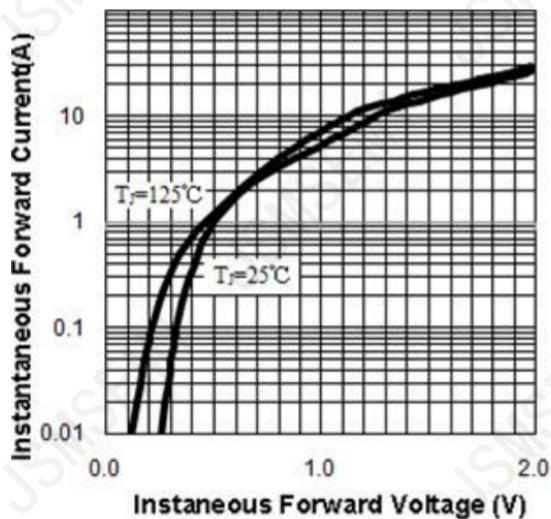


Fig.3 Typical Instantaneous Forward Characteristics

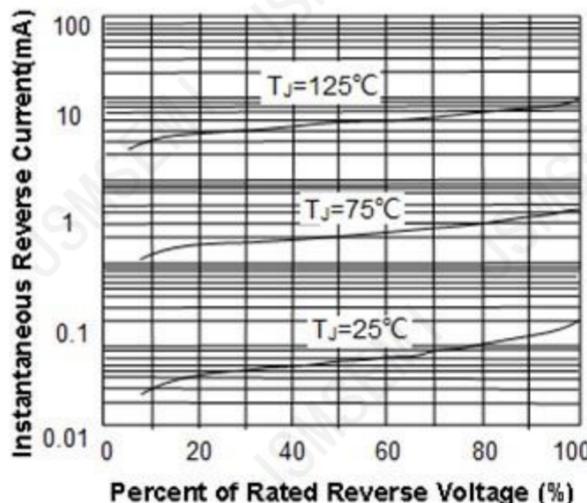
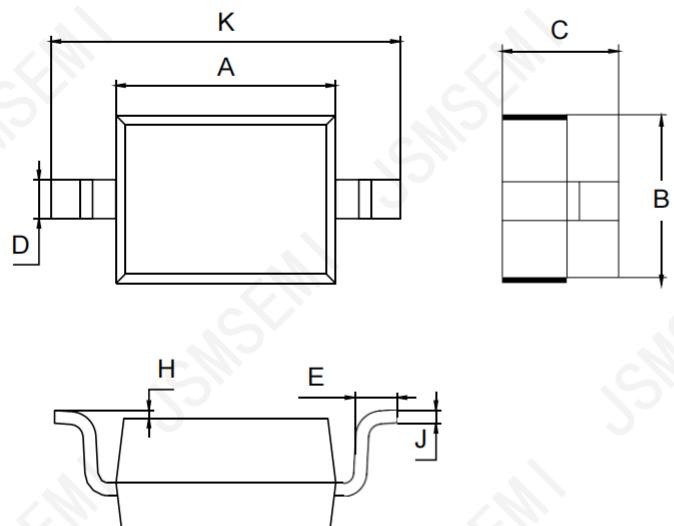


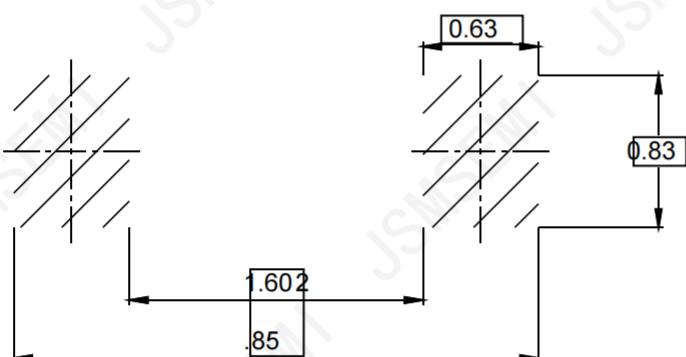
Fig.4 Typical Reverse Characteristics

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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