

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_A=25°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 _{θJA} *	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°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Forward Voltage	V _F *	I _F =1A			0.60	V
		I _F =3A	-	-	0.90	
Maximum Peak Reverse Current	I _R **	V _R = 40V	-	-	1	mA
Capacitance Between Terminals	C _T	V _R =4V, f=1MHz	-	39	120	pF

Pulse width ≤380 uS, Duty cycle < 2%

*pulse test , t_p≤5ms

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

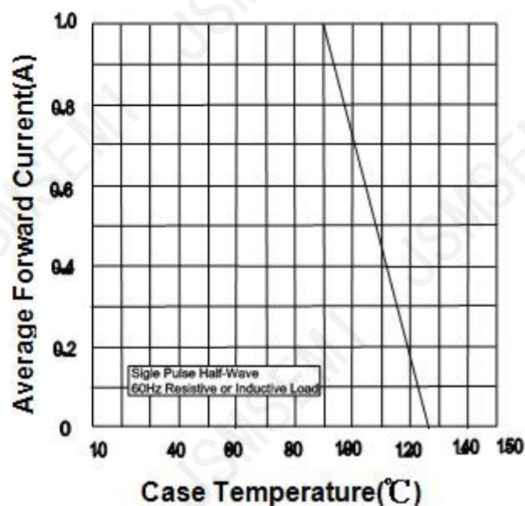


Fig.1 Forward Current Derating Curve

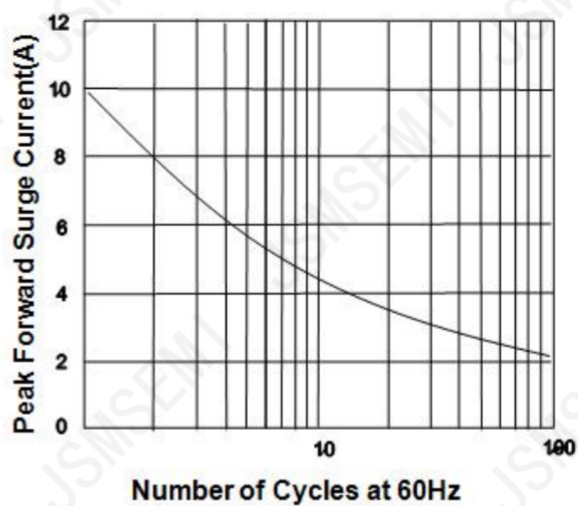


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

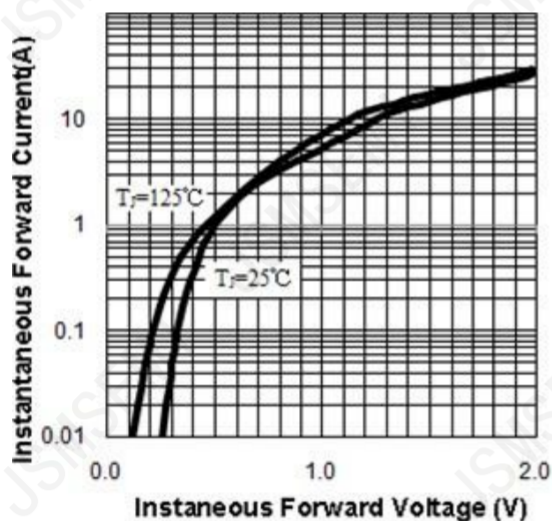


Fig.3 Typical Instantaneous Forward Characteristics

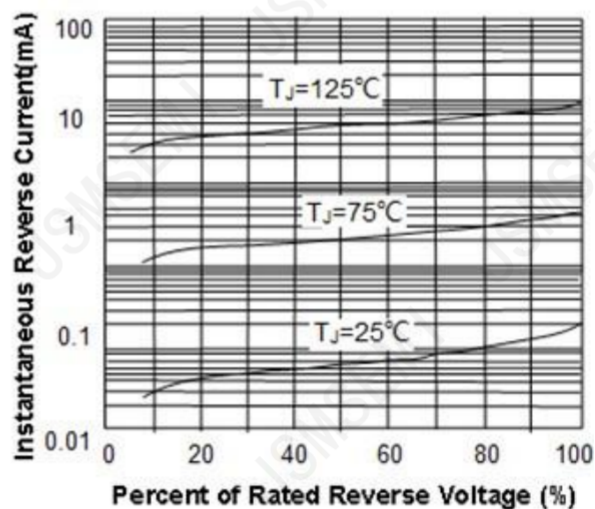
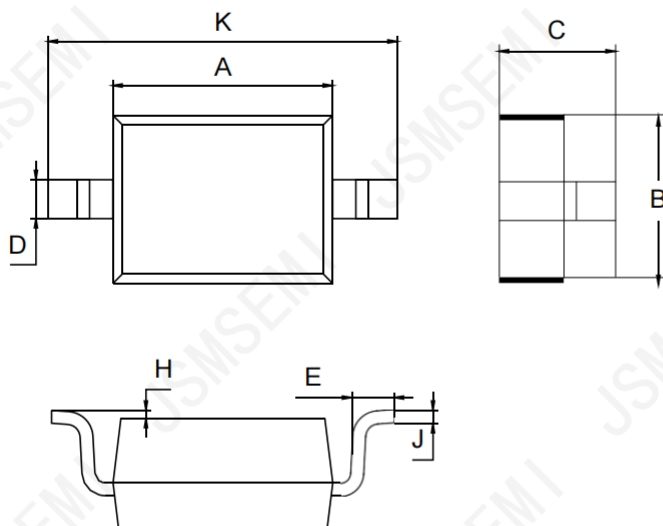


Fig.4 Typical Reverse Characteristics

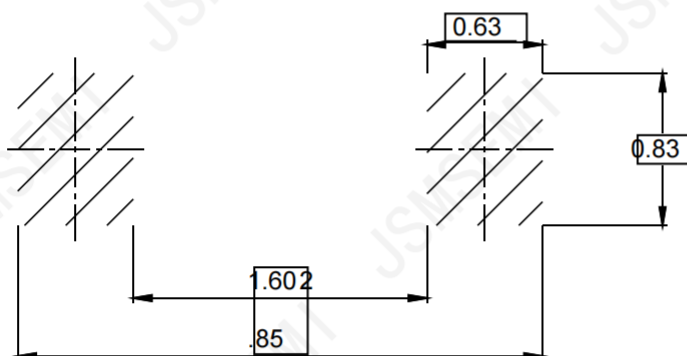
Package Outline Dimensions (unit: mm)

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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