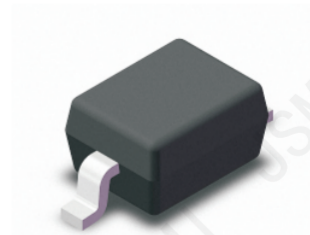
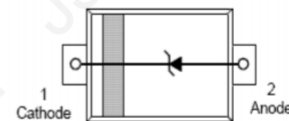


Description

The PMEG2020AEA,115-JSM is a Schottky Barrier Diode featuring a low forward voltage drop, which makes it highly suitable for applications requiring low power consumption. It comes in an extremely small SOD-323 package, enabling surface mounting, and is RoHS compliant with Green EMC. With a maximum repetitive reverse voltage of 40V and an average forward current of 2A, it can effectively perform in low voltage rectification, reverse polarity protection, and other low power consumption scenarios.



SOD-323



Features

- ◆ Low Forward Voltage Drop
- ◆ Extremely Small SOD-323 Package
- ◆ Surface Device Type Mounting
- ◆ RoHS Compliant
- ◆ Green EMC
- ◆ Band Indicates Cathode

Applications

- ◆ Low voltage rectification
- ◆ Reverse polarity protection
- ◆ Low power consumption applications

Maximum Ratings(TA=25℃)

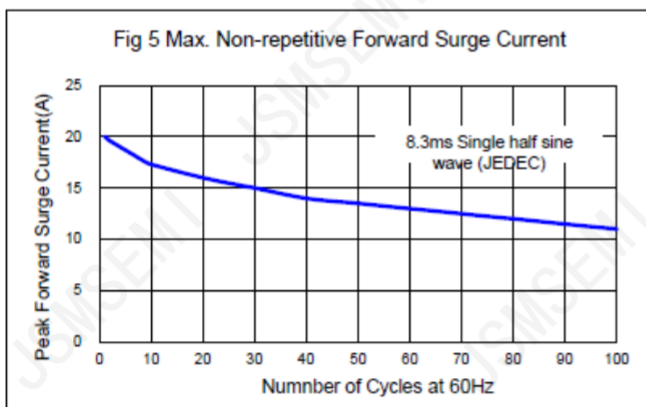
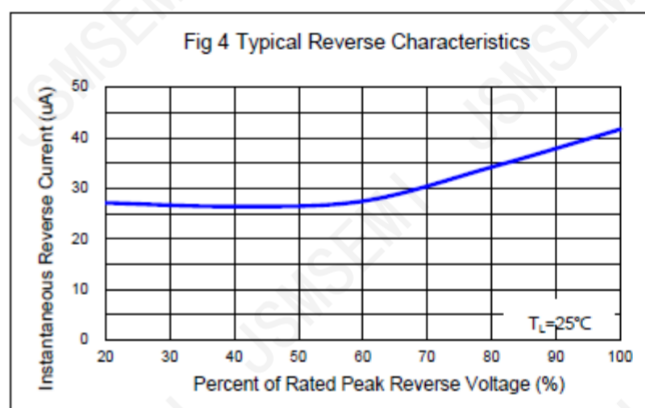
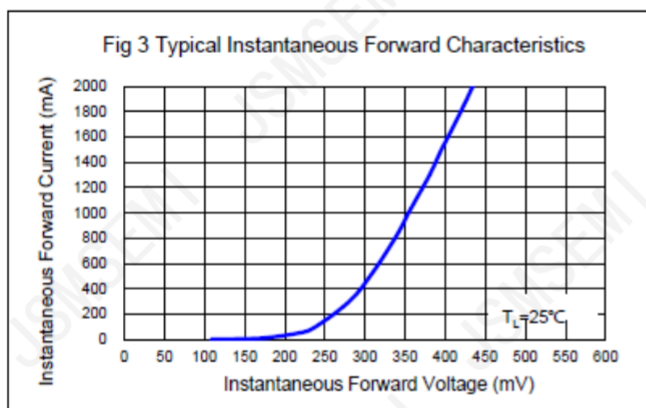
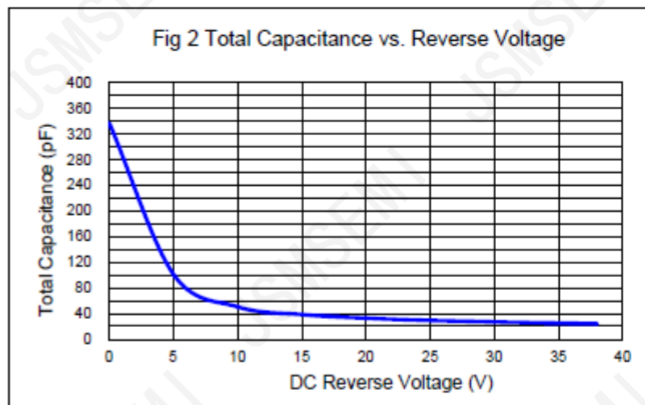
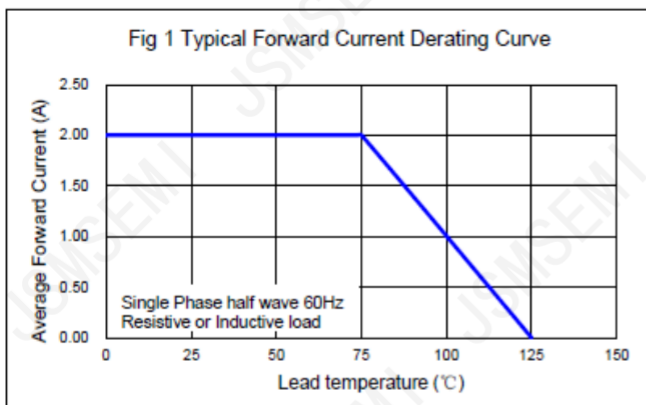
Symbol	Parameter	Value	Units
V_{RRM}	Maximum repetitive reverse voltage	40	V
V_R	Maximum DC blocking reverse voltage	40	V
$I_{F(AV)}$	Average Forward Current	2	A
I_{FSM}	Peak Forward Surge Current (At 8.3ms single half sine-wave)	20	A
T_J	Operating Junction Temperature	-50 to +125	°C
T_{STG}	Storage Temperature Range	-50 to +150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

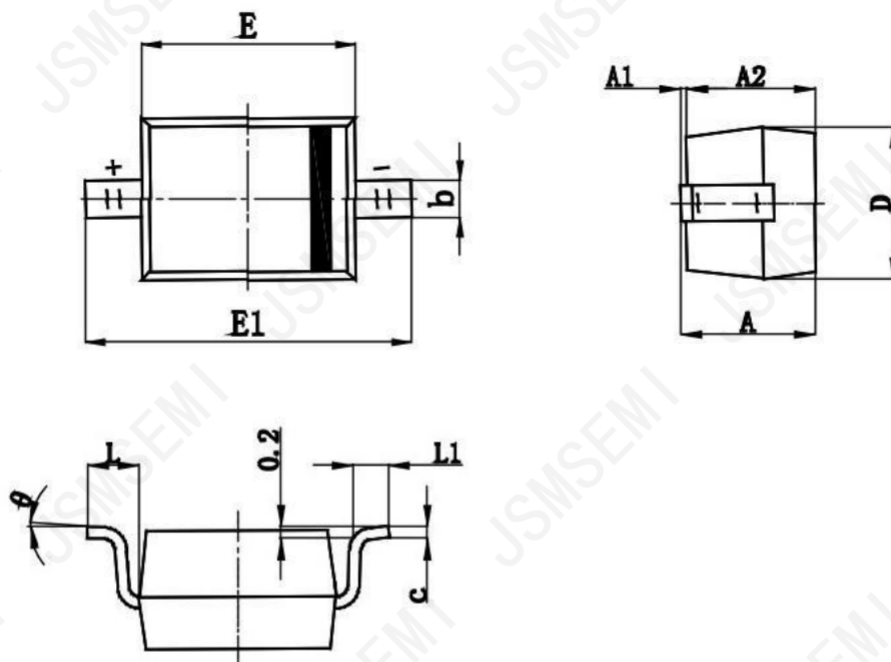
Electrical Characteristics(TA=25℃)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Breakdown Voltage at $I_R=0.1mA$	V_{BR}	40			V
Reverse Leakage Current at $V_R=40V$	I_R			80	μA
Forward Voltage at $I_F=1A$	V_F		0.37	0.42	V
Forward Voltage at $I_F=2A$	V_F			0.50	V
Junction Capacitance $V_R = 0V, f = 1MHz$	C_J		340	400	pF

Typical Performance Characteristics (TA=25°C unless otherwise Specified)

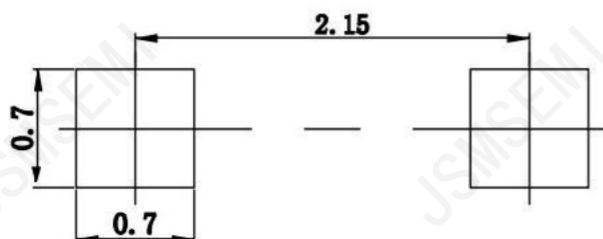


SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475REF.		0.019REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Revision History

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

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