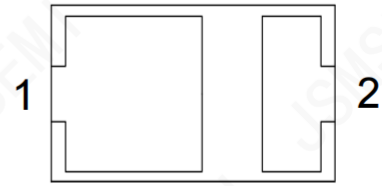


Description

The PMEG4020EPK,315-JSM is a Schottky Barrier Diode with a small power mold DFN1608-2L package. It boasts low forward voltage drop, low reverse current, and ultra-high-speed switching, ideal for low-power, high-efficiency electronic applications requiring reliable rectification and protection.



Features

- ◆ Low forward voltage drop
- ◆ Low reverse current (I_R)
- ◆ Small power mold type (DFN1608-2L)
- ◆ Ultra high-speed switching
- ◆ RoHS compliant (implied by standard SMD package)

Applications

- ◆ Low voltage rectification
- ◆ High efficiency DC-to-DC conversion
- ◆ Switch mode power supply
- ◆ LED backlight for mobile devices
- ◆ Low power consumption electronics
- ◆ Reverse polarity protection

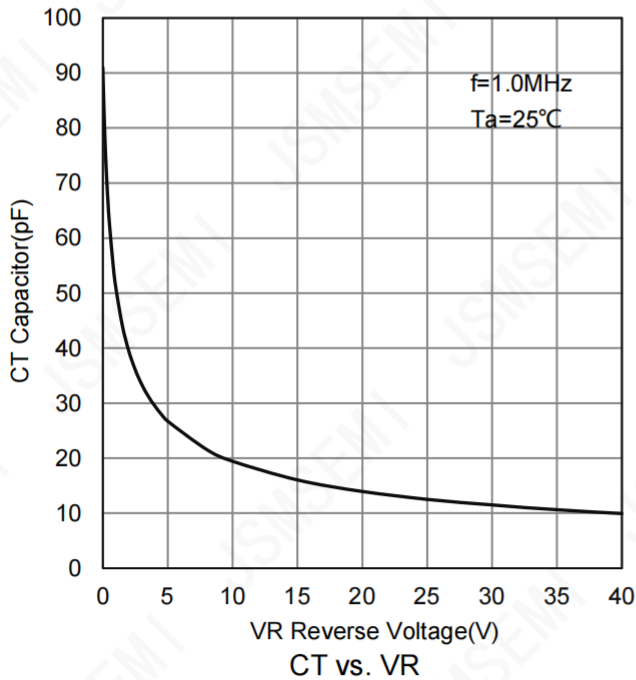
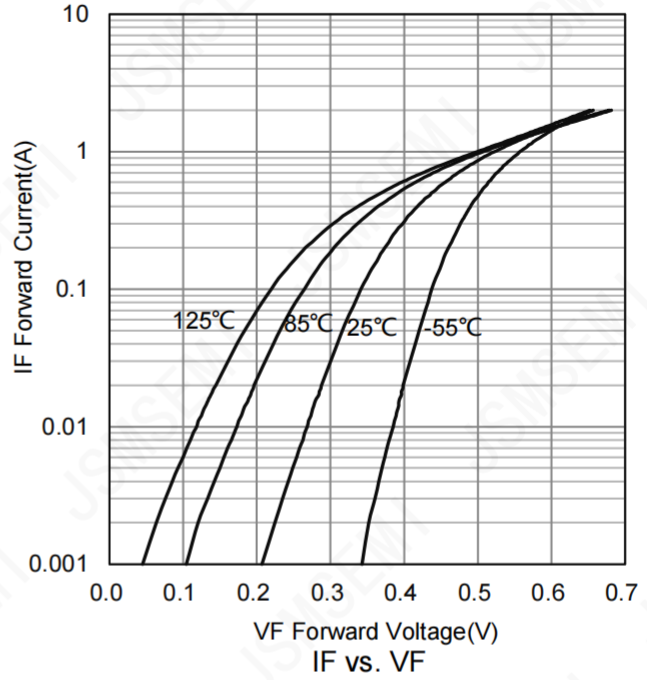
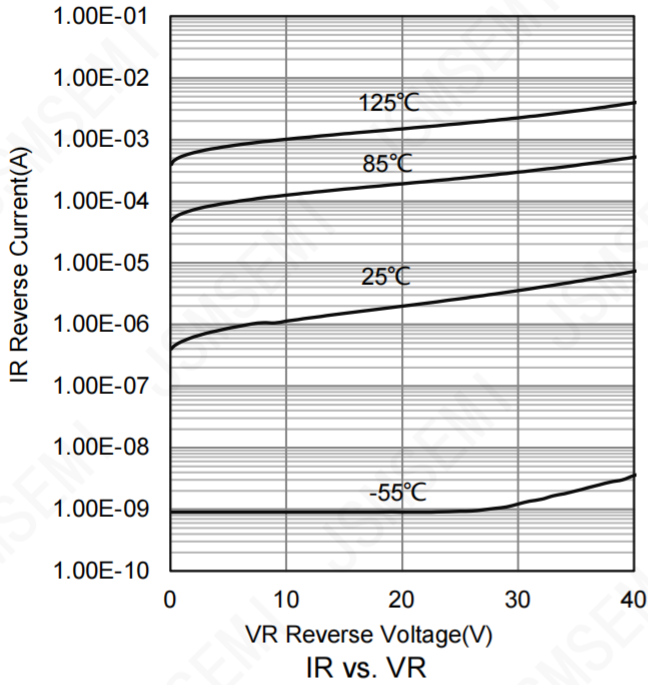
Maximum Ratings ($T_a = 25^\circ\text{C}$)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	40	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_O	Average Rectified Output Current	2	A
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	12	A
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	$^\circ\text{C}/\text{W}$
T_j	Operating Junction Temperature Range	-40 ~ +125	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55 ~ +150	$^\circ\text{C}$

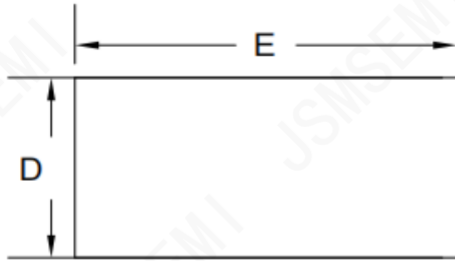
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	40			V
Reverse current	I_R	$V_R=40\text{V}$		50	100	μA
Forward voltage	V_F	$I_F=2\text{A}$		0.45	0.53	V
Diode capacitance	C_d	$V_R=0\text{V}; f=1\text{MHz}$		150		pF
		$V_R=10\text{V}; f=1\text{MHz}$		50		pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}; R_L=100\Omega;$ $I_{R(meas)}=1\text{mA}$		15		ns

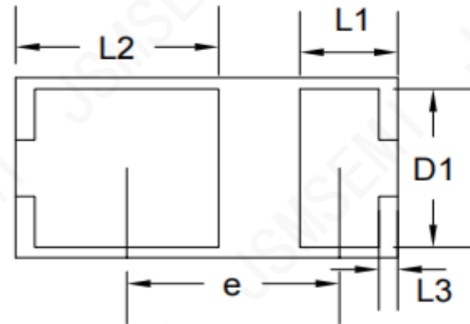
Typical Performance Curves



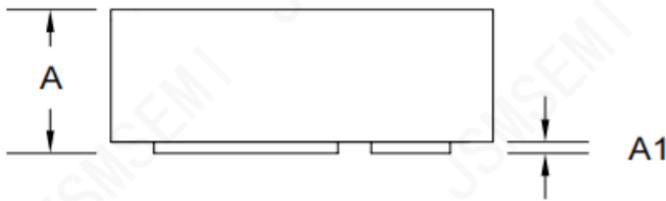
DFN1608-2 Package Outline Drawing



TOP VIEW
[顶视图]



BOTTOM VIEW
[底视图]



SIDE VIEW
[侧视图]

编号	尺寸 (mm)		
	Min	TYP	Max
A	0.500	0.585	0.670
A1	--	--	0.050
D	0.750	0.800	0.850
D1	0.600	0.700	0.800
E	1.550	1.600	1.650
L1	0.410REF		
L2	0.850REF		
L3	0.080REF		
e	0.090	--	1.000

Revision History

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

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