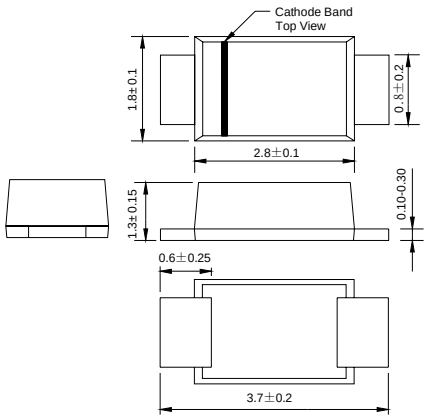
PMEG4010ER

1 A low VF MEGA Schottky barrier rectifier

特 性(FEATURES)：

- ◆ Extremely low V_F.
- ◆Low stored change,majority carrier conduction.
- ◆Low power loss/high efficient
- ◆For Use In Low Voltage, High Frequency Inverters.
- ◆Free Wheeling, And Polarity Protection Applications.

SOD-123FL



Dimensions in millimeters

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Parameter	Symbol	PMEG4010ER	Unit
Non-Repetitive Peak reverse voltage	V_{RSM}	48	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	I_O	1	A
Peak Forward Surge Current @=8.3ms	I_{FSM}	25	A
Power Dissipation	P_d	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta jA}$	500	℃/W
Storage Temperature	T_j,T_{stg}	-65 to +125	℃

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test Conditions	MIN	MAX	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R=1mA PMEG4010ER	40		V
Reverse voltage leakage current	I_R	V_R=40V PMEG4010ER		1	mA
Forward voltage	V_F	PMEG4010ER I_F=1A I_F=3A		0.6 0.9	V
Diode capacitance	C_D	V_R=4V,f=1MHz		120	pF

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Fig. 1 - Forward Current Derating Curve

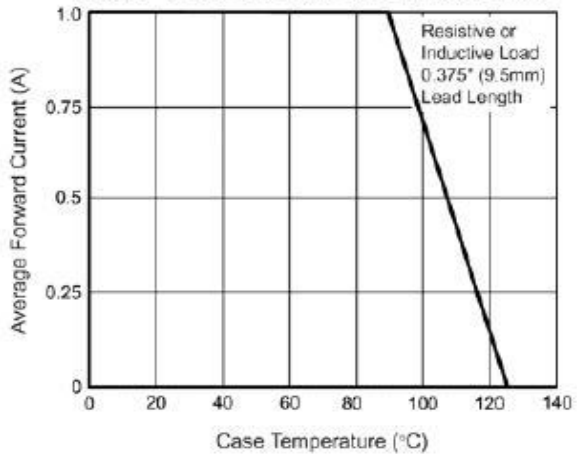


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

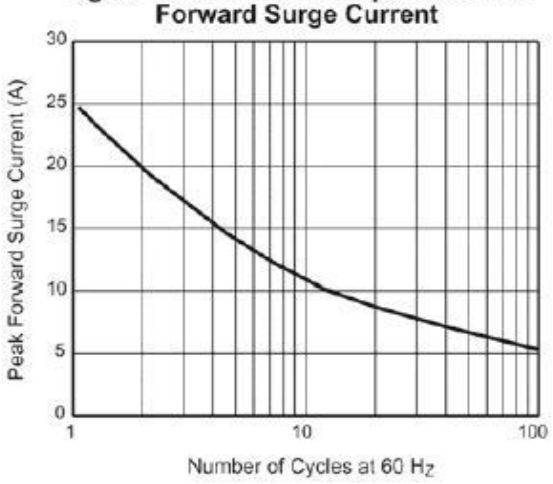


Fig. 3 - Typical Instantaneous Forward Characteristics

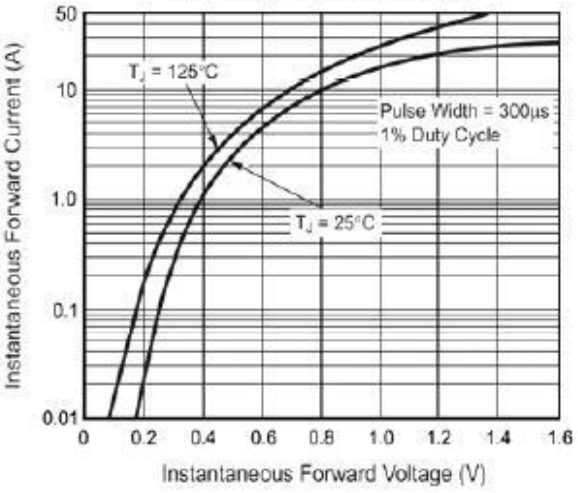


Fig. 4 - Typical Reverse Characteristics

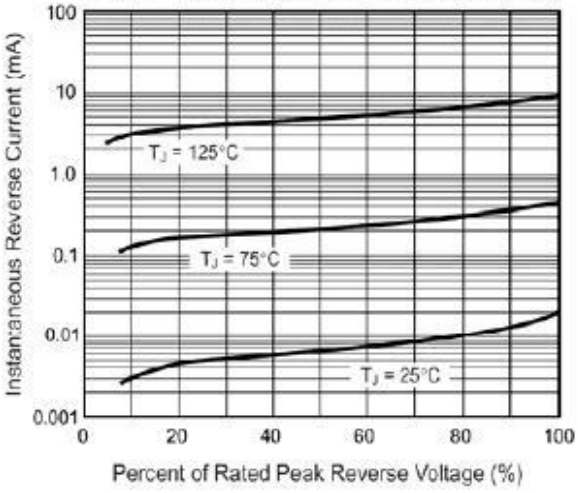


Fig. 5 - Typical Junction Capacitance

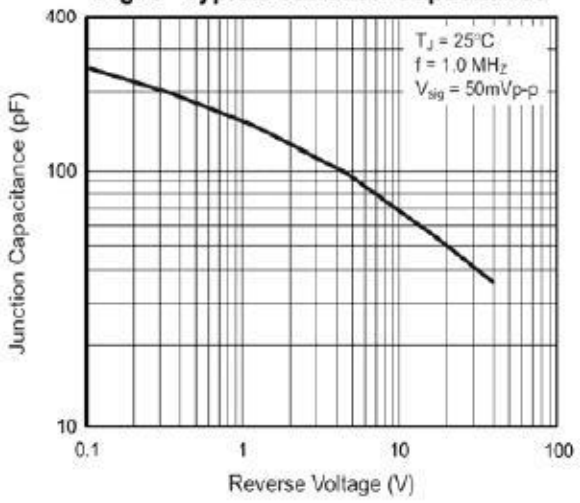


Fig. 6 - Typical Transient Thermal Impedance