PMEG3005EGWXF

0.5A Surface Mount Schottky Barrier Rectifiers

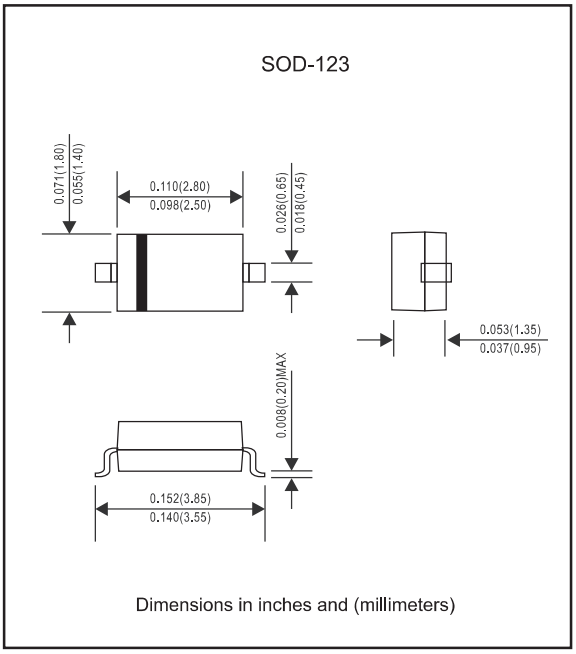
Features

- For use in low voltage, high frequency inverters
- Free wheeling, and polarity protection applications

Mechanical data

- **Case**: JEDEC SOD-123 molded plastic body
- **Terminals**: Solder plated, solderable per MIL-STD-750, Method 2026
- **Polarity**: Color band denotes cathode end
- **Mounting Position**: Any

Package outline



Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Average Rectified Output Current	I_O	0.5	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	5.5	A

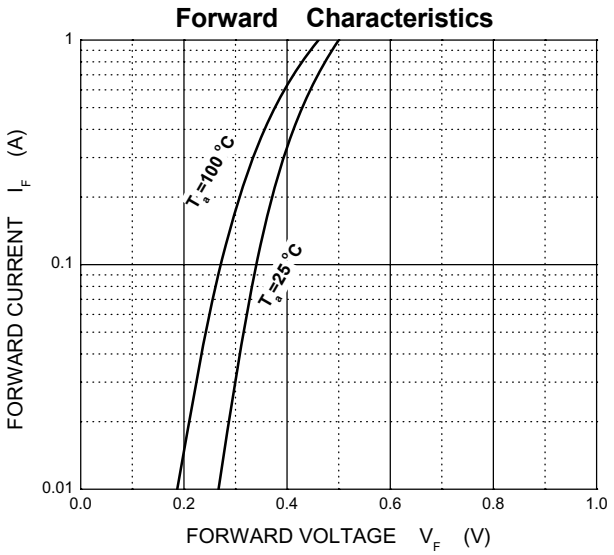
Thermal Characteristics

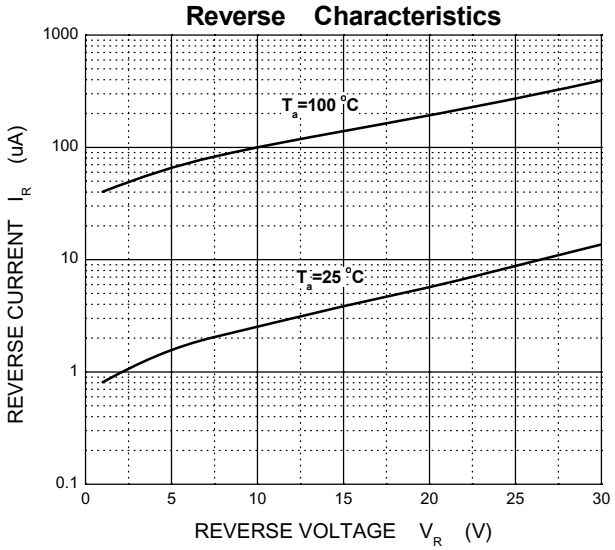
Characteristic	Symbol	Value	Unit
Power Dissipation	P_D	500	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +125	°C

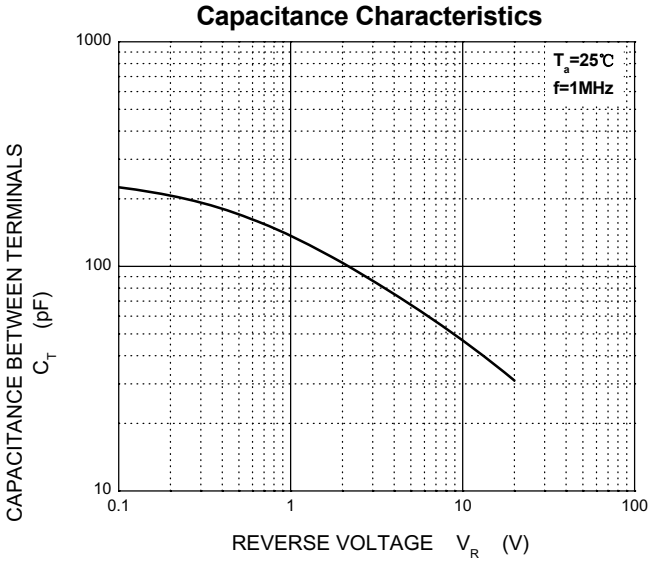
Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

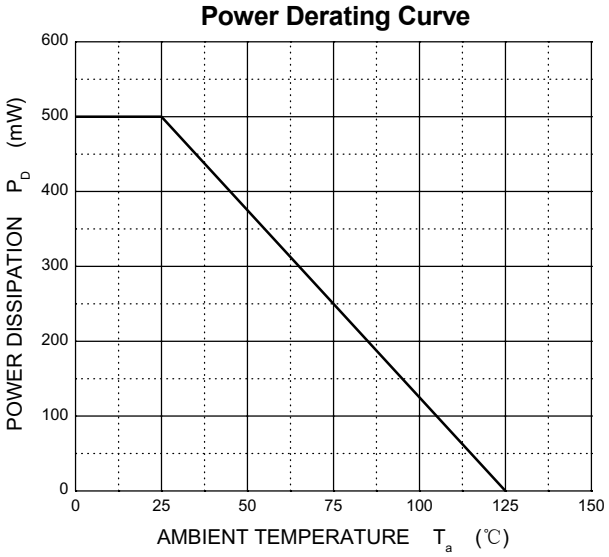
Characteristic	Symbol	Value	Unit	Test Conditions
Minimum Reverse Breakdown Voltage	$V_{(BR)R}$	30	V	I_R = 200μA
Maximum Forward Voltage Drop	V_{FM}	0.375 0.430	V	I_F = 0.1A, T_J = +25°C I_F = 0.5A, T_J = +25°C
Maximum Leakage Current	I_{RM}	20 130	μA	V_R = 15V, T_J = +25°C V_R = 30V, T_J = +25°C
Total Capacitance	C_T	170	pF	f = 1MHz, V_R = 0V DC

Rating and characteristic curves









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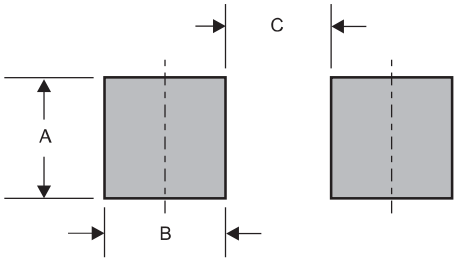
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
PMEG3005EGWXF	SE

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-123	0.048 (1.22)	0.036 (0.91)	0.093 (2.36)