

Features

- * Low forward voltage drop
- * Low reverse current
- * RoHS Compliant
- * REACH & SVHC Compliant
- * Halogen Compliant
- * SOD-523 Package



SOD-523

Ordering Information

Part Number	Packaging	Reel Size
PMEG3005EBF	3000/Tape & Reel	7 inch

Circuit Diagram



Marking Diagram :



Top view

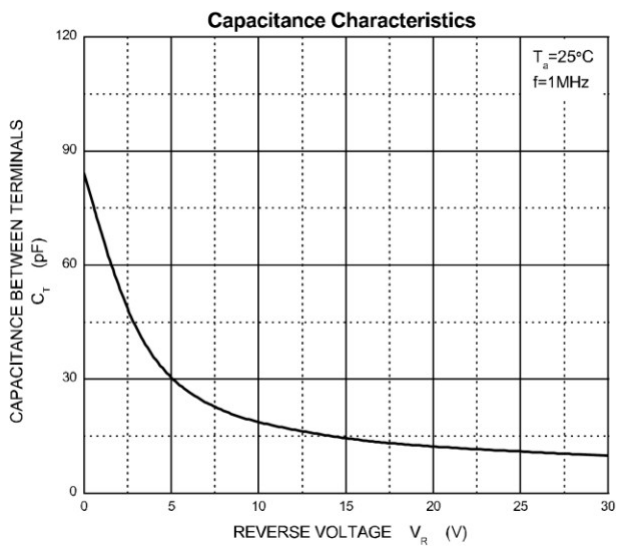
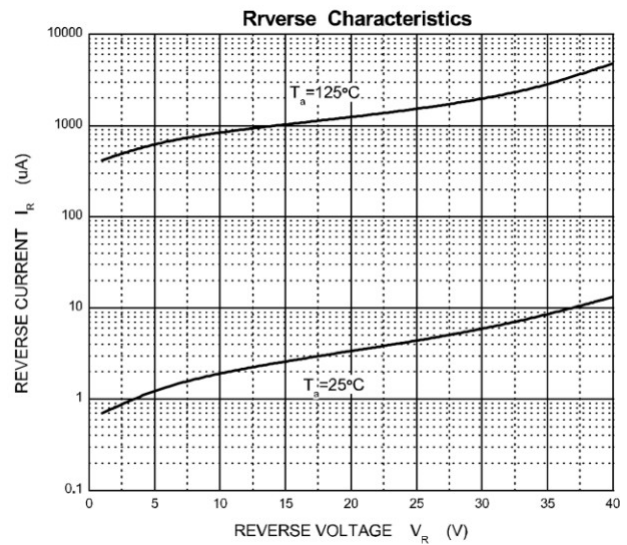
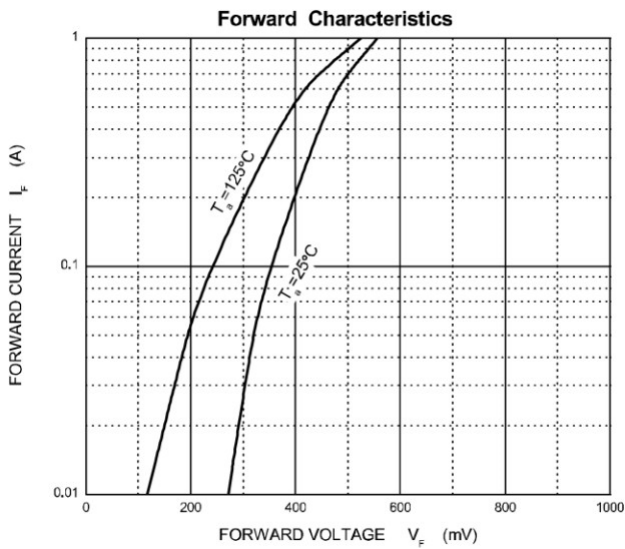
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	40	V
DC blocking voltage	V_R	40	V
Continuous forward current	I_O	1	A
Non-repetitive peak forward current @ $t=8.3\text{ms}$	I_{FSM}	7	A
Power dissipation	P_D	500	mW
Junction temperature	T_J	-40 to +125	$^\circ\text{C}$
Storage temperature	T_{STG}	-55 to +150	$^\circ\text{C}$

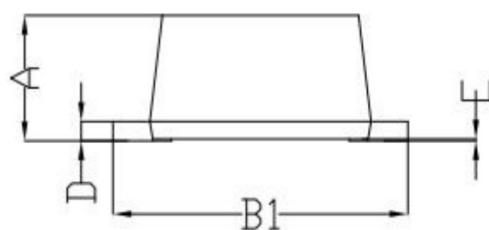
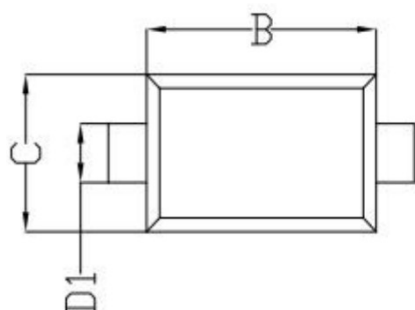
Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Breakdown voltage	V_{BR}	$I_T = 1\text{mA}$	40			V
Reverse leakage current	I_R	$V_R = 40\text{V}$		10	40	μA
Forward voltage	V_F	$I_F = 0.1\text{A}$			420	mV
Forward voltage	V_F	$I_F = 0.2\text{A}$			450	mV
Forward voltage	V_F	$I_F = 1\text{A}$			610	mV
Diode capacitance	C_D	$V_R = 10\text{V}, f = 1\text{MHz}$		19		pF

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

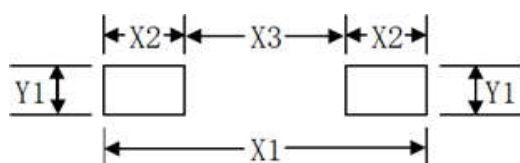


SOD-523 Package Outline Drawing



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	Min	Typ	Max	Min	Typ	Max
A	0.60	0.65	0.70	0.0236	0.0256	0.0276
B	1.15	1.20	1.25	0.0453	0.0472	0.0492
B1	1.55	1.60	1.65	0.0610	0.0630	0.0650
C	0.75	0.80	0.85	0.0295	0.0315	0.0335
D	0.10	0.11	0.12	0.0039	0.0043	0.0047
D1	0.28	0.30	0.32	0.0110	0.0118	0.0126
E	0.00	-	0.02	0.0000	-	0.0008

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETER	INCHES
X1	2.00	0.079
X2	0.60	0.024
X3	0.80	0.031
Y1	0.50	0.020