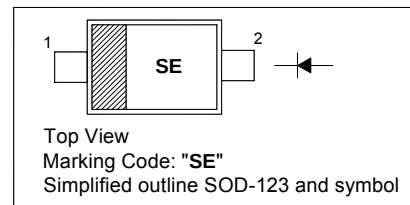


MBR0530

SURFACE MOUNT SCHOTTKY POWER RECTIFIER

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



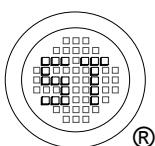
Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	30	V
Maximum DC Blocking Voltage	V_R	30	V
Average Forward Rectified Current	$I_{F(AV)}$	0.5	A
Peak Forward Surge Current (8.3 ms Single Half Sine-wave)	I_{FSM}	5.5	A
Thermal Resistance Junction to Lead	$R_{\theta JL}$	150	$^{\circ}\text{C/W}$
Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta JA}$	206	$^{\circ}\text{C/W}$
Operating Junction Temperature	T_J	- 65 to + 125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 125	$^{\circ}\text{C}$

¹⁾ 1 inch square pad size (1 X 0.5 inch for each lead) on FR4 board

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 500\text{ mA}$	V_F	0.375 0.5	V
Reverse Current at $V_R = 30\text{ V}$ at $V_R = 15\text{ V}$	I_R	130 20	μA



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ISO/TS 16949:2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

Dated : 13/12/2006

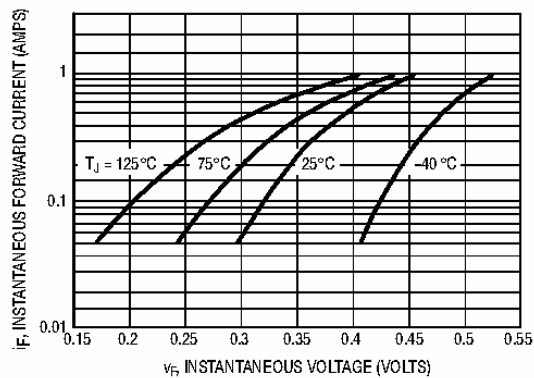


Figure 1. Typical Forward Voltage

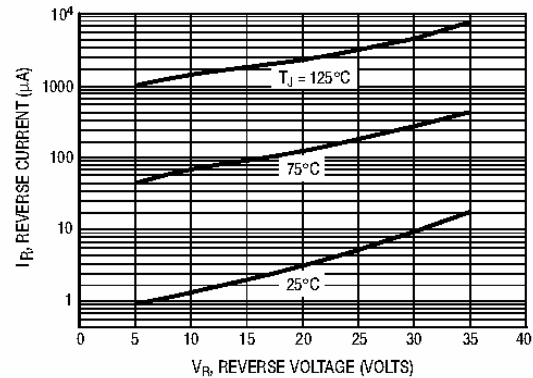


Figure 2. Typical Reverse Current

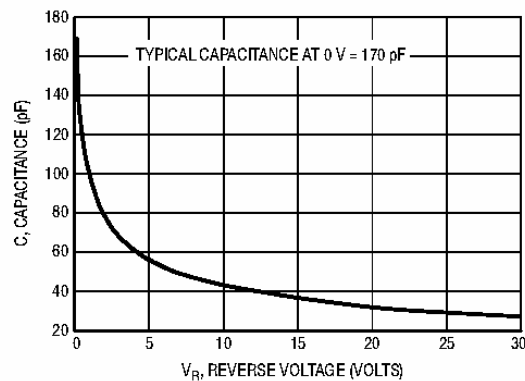
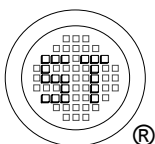


Figure 3. Typical Capacitance



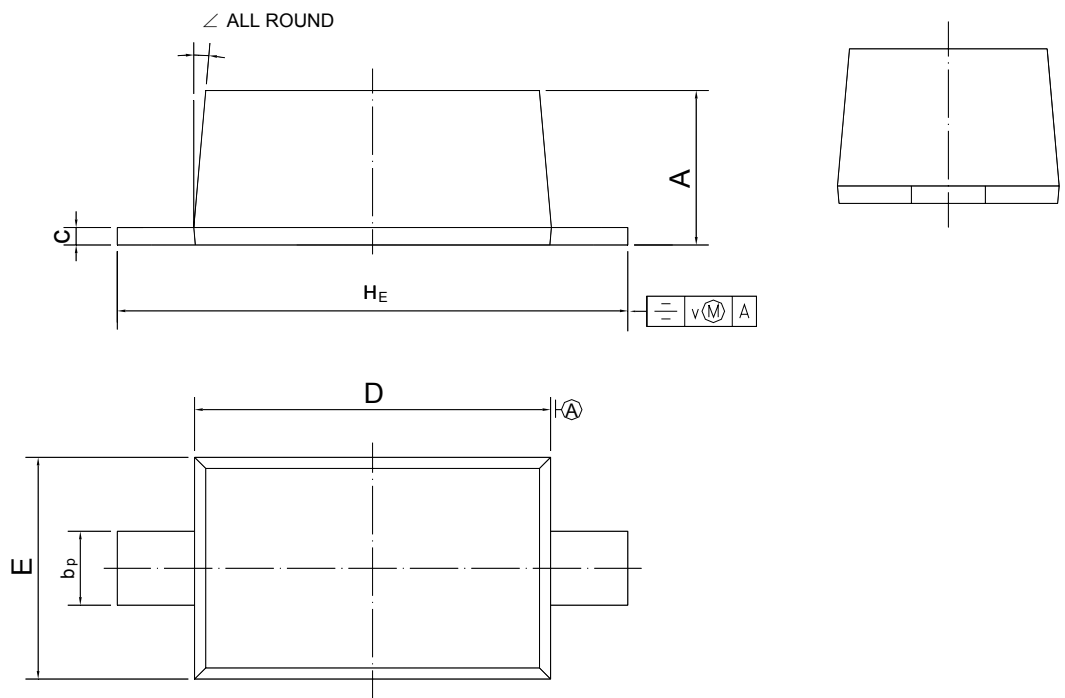
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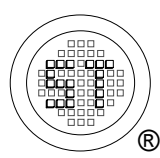
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	c	D	E	H _E	v	∠
mm	1.15 1.05	0.6 0.5	0.135 0.127	2.7 2.6	1.65 1.55	3.9 3.7	0.2	5°



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