



**FUKUCOM COMPANY LTD.**

**福 靈 有 限 公 司**

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

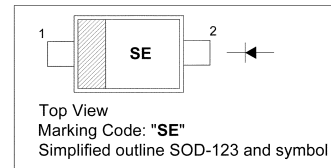
TEL: 852-2790 0314 FAX: 852-2790 0206

**MBR0530**

**SURFACE MOUNT SCHOTTKY POWER RECTIFIER**

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



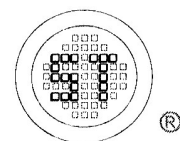
**Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )**

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 <sup>1)</sup>	$R_{\theta JA}$	206	$^\circ\text{C/W}$
Operating Junction Temperature	$T_J$	- 65 to + 125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 125	$^\circ\text{C}$

<sup>1)</sup> 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	$\mu\text{A}$



**SEMTECH**

Dated : 13/12/2006



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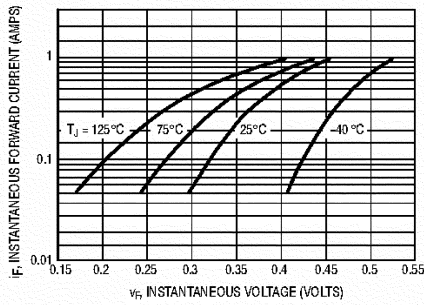


Figure 1. Typical Forward Voltage

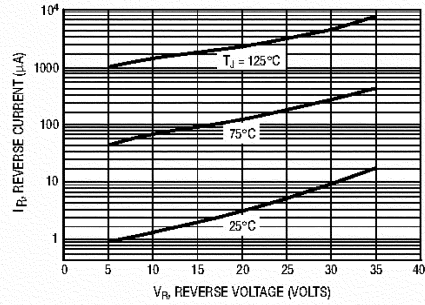


Figure 2. Typical Reverse Current

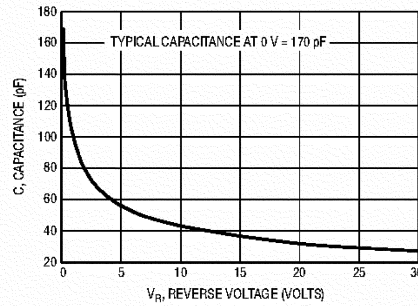
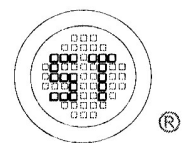


Figure 3. Typical Capacitance



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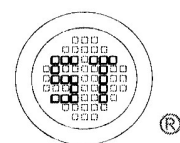
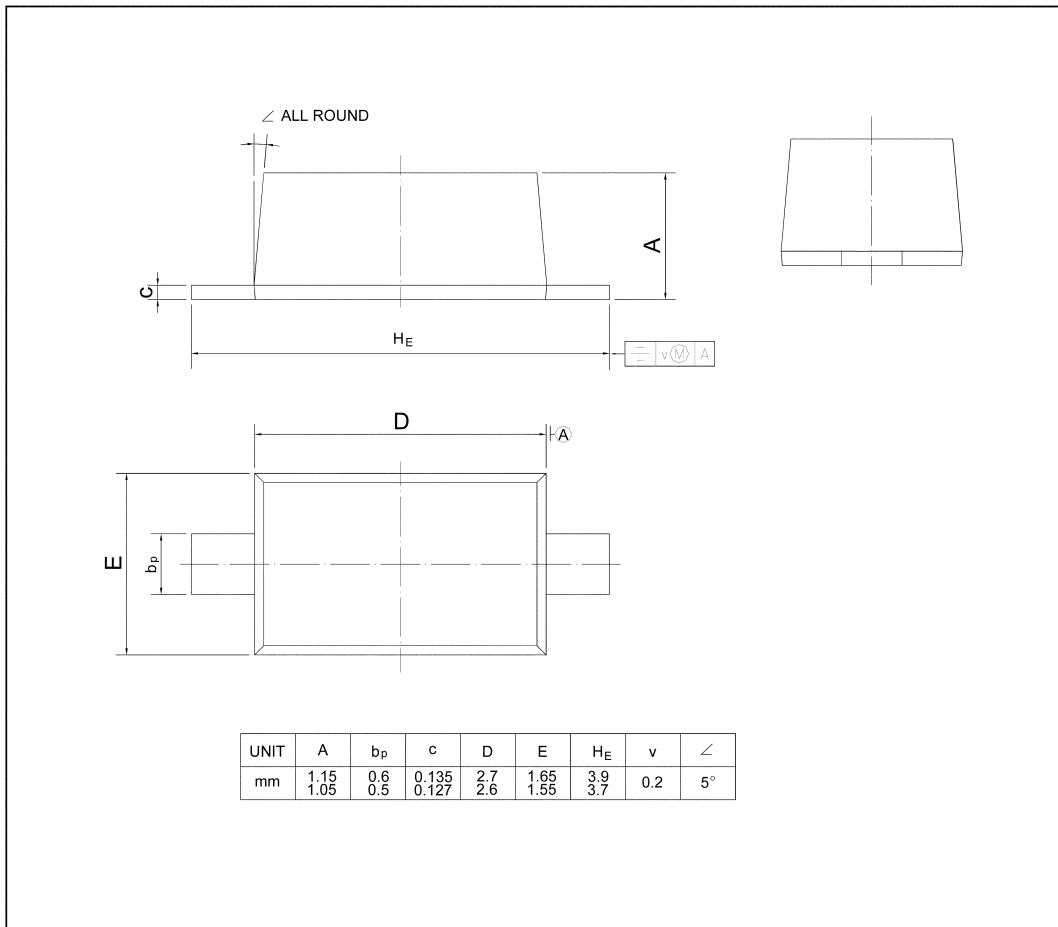
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**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

SOD-123



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