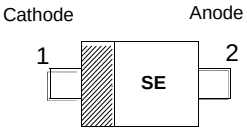
迈拓电子
MAITUO ELECTRONIC

MBR0530 Surface Mount Schottky Barrier Diode

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance
- Also Available in Lead Free Version



Marking Code: **SE**

SOD-123

Absolute Maximum Ratings (T_a = 25 °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	°C/W
Thermal Resistance Junction to Ambient [1)]	$R_{\theta JA}$	206	°C/W
Operating Junction Temperature	T_j	- 65 to + 125	°C
Storage Temperature Range	T_{stg}	- 65 to + 125	°C

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

Characteristics at T_a = 25 °C

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

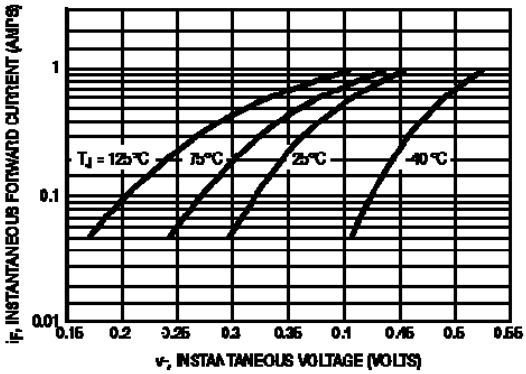


Figure 1. Typical Forward Voltage

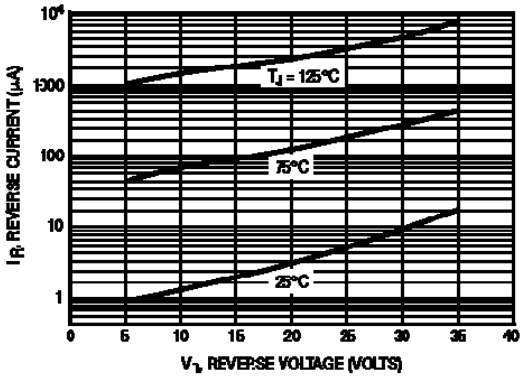


Figure 2. Typical Reverse Current

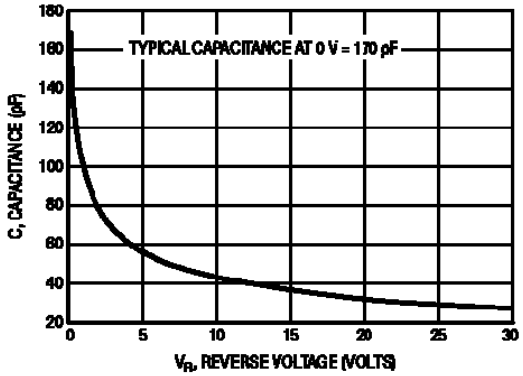


Figure 3. Typical Capacitance

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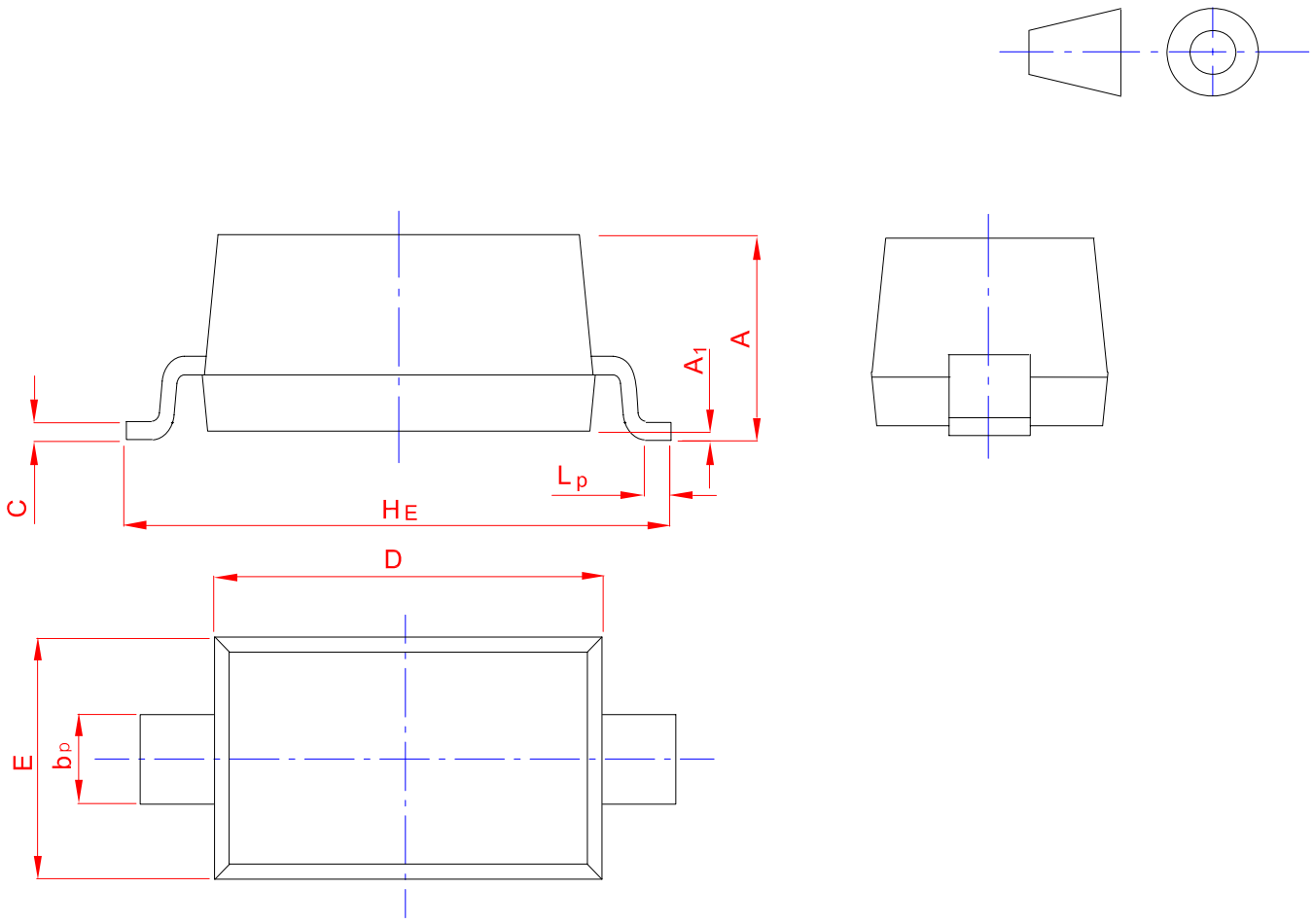
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-123**



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20