



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.

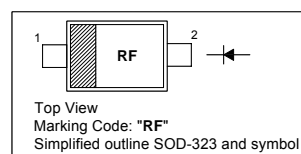
TEL: 852-2790 0314 FAX: 852-2790 0206

MBR0530WS

SURFACE MOUNT SCHOTTKY POWER RECTIFIER

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



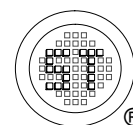
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
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}	2	A
Power Dissipation ¹⁾	P_d	235	mW
Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta JA}$	426	$^\circ\text{C/W}$
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	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 500\text{ }\mu\text{A}$	$V_{(BR)R}$	30	-	V
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 500\text{ mA}$	V_F	- -	0.375 0.5	V
Reverse Current at $V_R = 15\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 30\text{ V}$	I_R	- - -	80 100 500	μA



Dated : 08/01/2007



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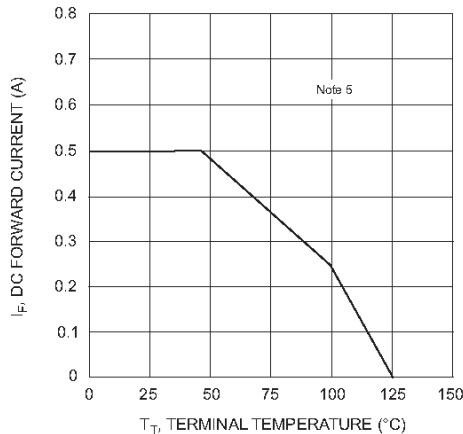


Fig. 1 Forward Current Derating Curve

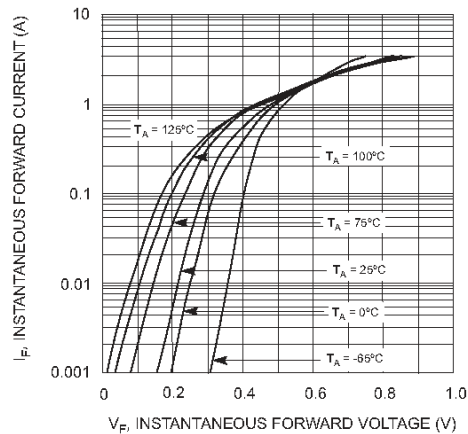


Fig. 2 Typical Forward Characteristics

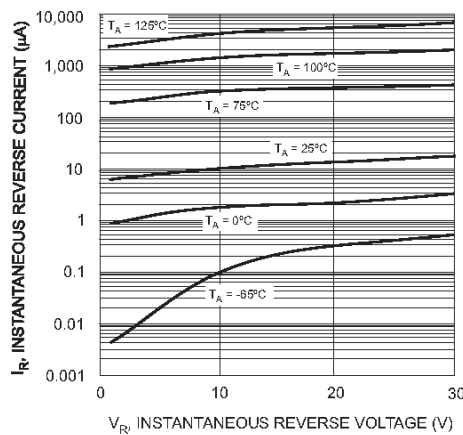


Fig. 3 Typical Reverse Characteristics

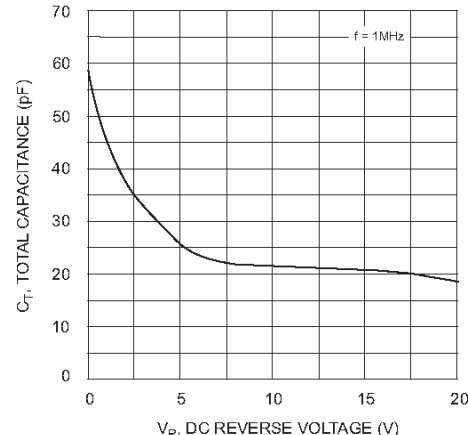


Fig. 4 Typ. Total Capacitance vs Reverse Voltage

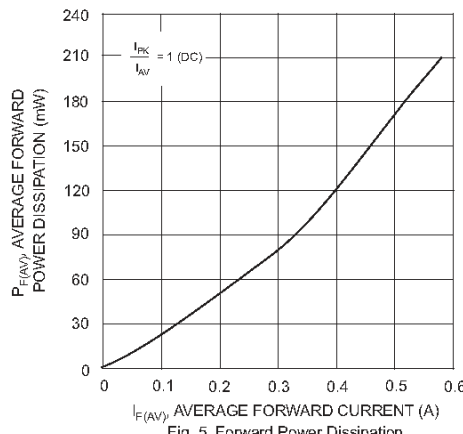
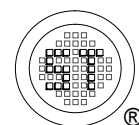


Fig. 5 Forward Power Dissipation



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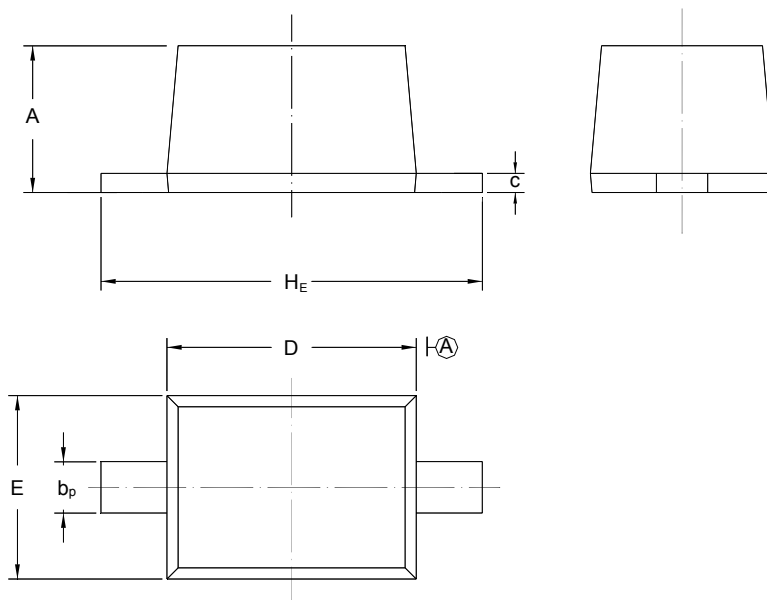
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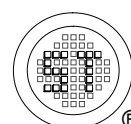
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b _p	C	D	E	H _E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30



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