

MBR0520 THRU MBR0540

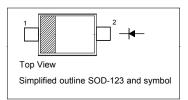
Surface Mount Schottky Barrier Diodes

Features

• Low Forward Voltage

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings (T_a = 25 °C)

Parameter		Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	MBR0520 MBR0530 MBR0540	V_{RRM}	20 30 20	V	
Reverse Voltage	MBR0520 MBR0530 MBR0540	V_{R}	20 30 40	V	
Average Forward Rectified Current		$I_{F(AV)}$	350	mA	
Non-Repetitive Peak Forward Surge Current at t = 1 s		I _{FSM}	2	А	
Power Dissipation		P _{tot}	400	mW	
Operating and Storage Temperature Range		T_j , T_{stg}	- 65 to + 125	°C	

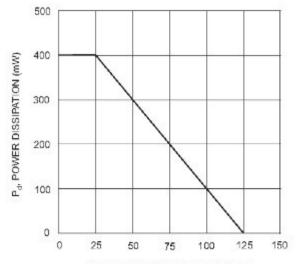
Characteristics at T₂ = 25 °C

Parameter		Symbol	Min.	Тур.	Max.	Unit
Reverse Breakdown Voltage						
at $I_R = 10 \text{ uA}$	MBR0520 MBR0530 MBR0540	V _{(BR)R}	20 30 40	- - -	- - -	V
Reverse Leakage Current			70			
at $V_R = 10 \text{ V}$ at $V_R = 20 \text{ V}$ at $V_R = 30 \text{ V}$	MBR0520 MBR0530 MBR0540	I _R	- - -	- - -	5 5 5	μΑ
Forward Voltage at I _F = 20 mA at I _F = 200 mA		V _F	-	- -	0.37 0.6	V
Total Capacitance at V _R = 0 V, f = 1 MHz		C _T	-	50	-	pF
Reverse Recovery Time at $I_F = I_R = 200$ mA, $I_{rr} = 0.1$ I_R , $R_L = 100$ Ω		t _{rr}	-	10	-	ns

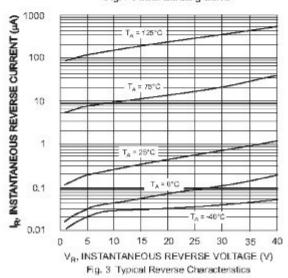
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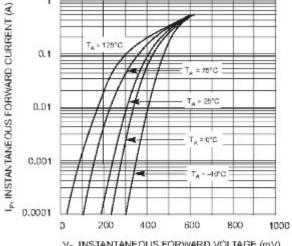


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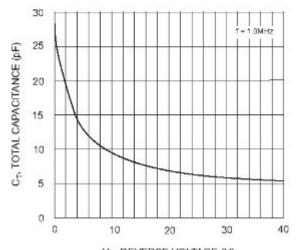


T_A, AMBIENT TEMPERATURE (°C) Fig.1 Power Denating Curve





V_F, INSTANTANEOUS FÖRWARD VÖLTAGE (mV) Fig. 2 Typical Forward Characteristics



V_R, REVERSE VOLTAGE (V) Fig. 4 Typ. Total Capacitance vs. Reverse Voltage

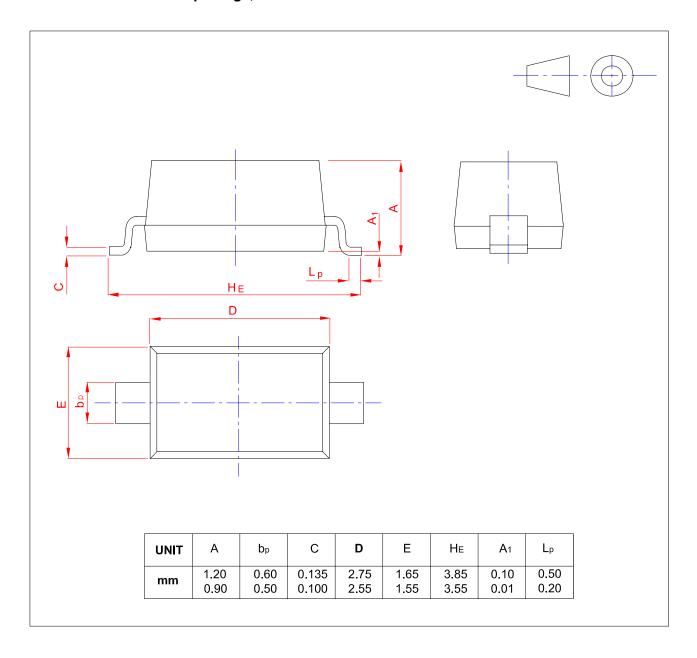


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ACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



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