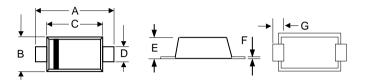


MBR0520W Surface Mount Schottky Barrier Diode

Features

- * Very low forward voltage
- * High Current Capability
- * Marking Code: SC









SOD-123F							
DIM	INCHES		MM				
	MIN	MAX	MIN	MAX			
А	0.138	0.154	3.50	3.90			
В	0.067	0.075	1.70	1.90			
С	0.102	0.114	2.60	2.90			
D	0.031	0.043	0.80	1.10			
E	0.035	0.043	0.88	1.08			
F	0.004	0.008	0.10	0.20			
G	0.028	0.035	0.70	0.90			

Maximum Ratings (T_A=25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	Vrrm	20	V
Working Peak Reverse Voltage	Vrwm	20	V
DC Reverse Voltage	Vr	20	V
Average Rectified Forward Current	I F(AV)	0.5	А
Peak Forward Surge Current (8.3 ms Single Half Sine-wave)	IFSM	5.5	А
Thermal Resistance Junction to Ambient	RөJA	340	°C/W
Thermal Resistance Junction to Lead	Rejl	150	°C/W
Junction Temperature	Tj	- 65 to + 150	°C
Storage Temperature	Tstg	- 65 to + 150	°C

Note: 1) Following any rated load condition and with rated VRRM applied.

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MBR0520W Surface Mount Schottky Barrier Diode

Electrical Characteristics (T_A=25 °C unless otherwise noted)

Parameter	Symbol	Max.	Unit
Forward Voltage			
at I _F = 0.1 A, T _j = 25°C		0.375	
at I _F = 0.5 A, T _j = 25°C	VF	0.44	V
at I _F = 0.1 A, T _j = 100°C		0.26	
at I _F = 0.5 A, T _j = 100°C		0.36	
Reverse Current			
at V _R = 10 V, T _j = 25°C		40	μA
at V _R = 20 V, T _j = 25°C	lR	150	μA
at $V_R = 10 \text{ V}$, $T_j = 100^{\circ}\text{C}$		3	mA
at V _R = 20 V, T _j = 100°C		7	mA
Total Capacitance	Ctot	110	n.F
at V_R = 5 V (test signal range 100 KHz to 1 MHz), T_j = 25 $^{\circ}$ C	Ctot	110	pF

Ratings and Characteristic Curves

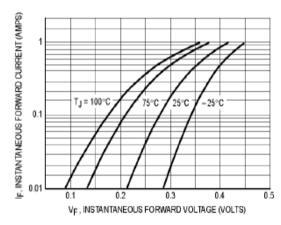


Figure 1. Typical Forward Voltage

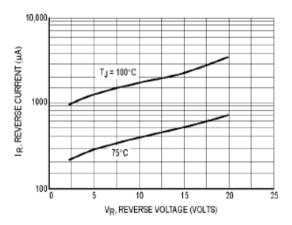


Figure 2. Typical Reverse Current

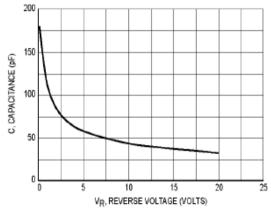


Figure 3. Typical Capacitance

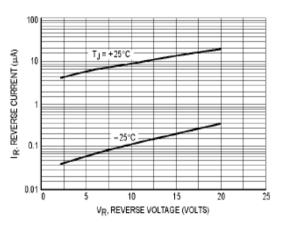


Figure 4. Typical Reverse Current

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MBR0520W Surface Mount Schottky Barrier Diode

Ordering Information

Part No.	Package	Packing Code	Packing
MBR0520W	SOD-123F	R30	3000pcs/Reel

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