

MBR0520W

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

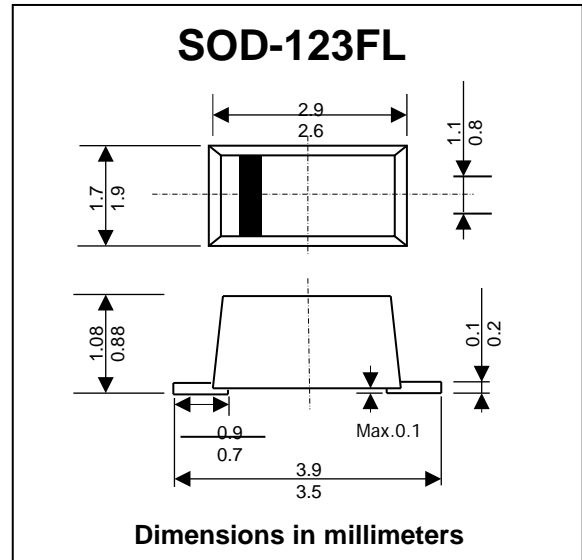
PRV : 20 Volts
I_o : 0.5 Ampere

FEATURES :

- * High Current Capability
- * Very Low Forward Voltage
- * Package Designed for Optimal Automated Board Assembly
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SOD-123FL
- * Weight: 0.006 ounces, 0.02 gram
- * MBR0520W Marking Code : SC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT	
Maximum Peak Repetitive Reverse Voltage	V _{RRM}	20	V	
Maximum Working Peak Reverse Voltage	V _{RWM}	20	V	
Maximum DC Blocking Voltage	V _R	20	V	
Maximum Average Rectified Forward Current	I _{F(AV)}	0.5	A	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	5.5	A	
Maximum Forward Voltage	V _F	0.375	V	
at I _F = 0.1 A, T _J = 25 °C		0.440		
at I _F = 0.5 A, T _J = 25 °C		0.260		
at I _F = 0.1 A, T _J = 100 °C		0.360		
Maximum Reverse Current	I _R	at V _R = 10 V, T _J = 25 °C	40	μA
		at V _R = 20V, T _J = 25 °C	150	μA
		at V _R = 10 V, T _J = 100 °C	3.0	mA
		at V _R = 20V, T _J = 100 °C	7.0	mA
Thermal Resistance Junction to Ambient	R _{ΘJA}	340	°C/W	
Thermal Resistance Junction to Lead	R _{ΘJL}	150	°C/W	
Junction Capacitance at V _R = 5V _{DC} (test signal rang 100 KHz to 1 MHz), T _J = 25 °C	C _T	110	pF	
Junction Temperature Range	T _J	- 65 to + 150	°C	
Storage Temperature Range	T _{STG}	- 65 to + 150	°C	

RATING AND CHARACTERISTIC CURVES (MBR0520W)

FIG.1 - DERATING CURVE

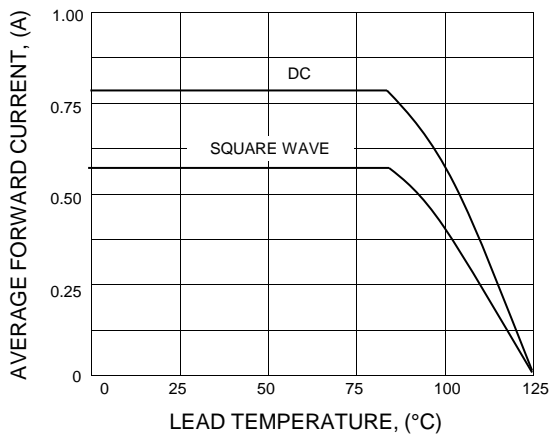


FIG.2 - TYPICAL CAPACITANCE

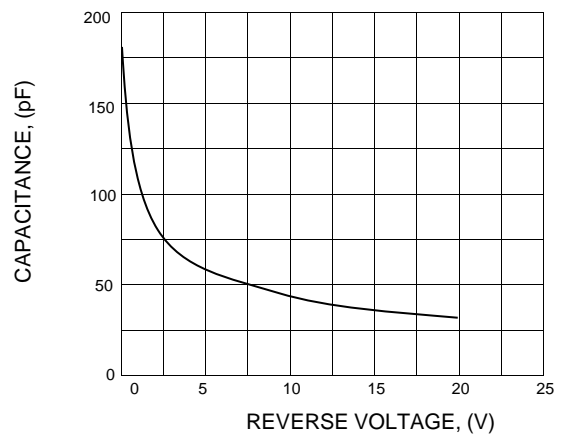


FIG.3 - TYPICAL FORWARD VOLTAGE

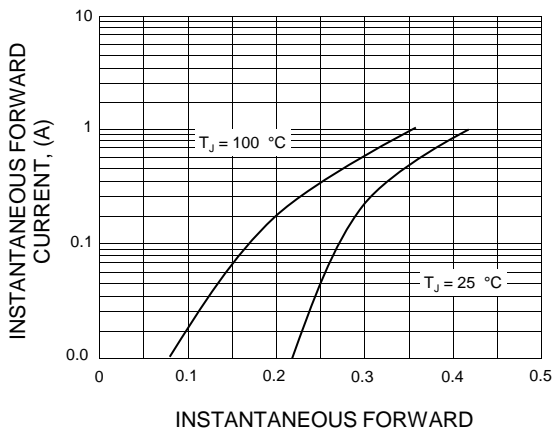


FIG.4 - TYPICAL REVERSE CURRENT

