

MBR0520L

PRV : 20 Volts
I_o : 0.5 Ampere

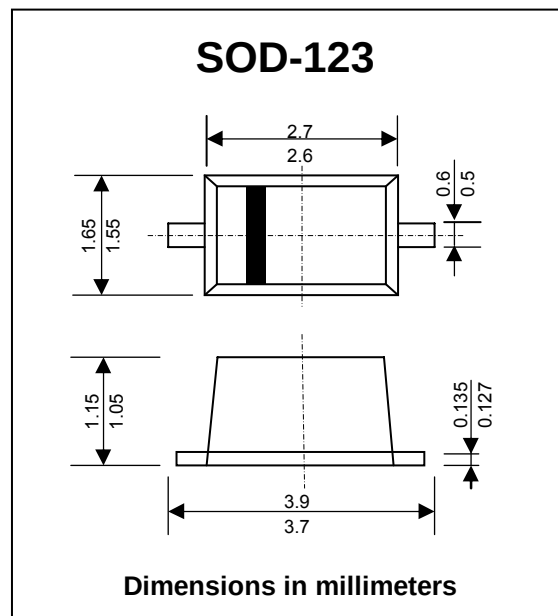
FEATURES :

- * Guardring for Stress Protection
- * Very Low Forward Voltage
- * 125 °C Operating Junction Temperature
- * Package Designed for Optimal Automated Board Assembly
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SOD-123
- * Weight : 0.01 gram (approximately)

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



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, T _L = 90 °C	I _{F(AV)}	0.5	A
Maximum Non-Repetitive Peak Forward Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60 HZ)	I _{FSM}	5.5	A
Maximum Instantaneous Forward Voltage at I _F = 0.5 A (Note 1)	V _F	0.385(T _J = 25 °C)	V
		0.330(T _J = 100 °C)	
Maximum Instantaneous Reverse Current at Rated DC Voltage = 20 V (Note 1)	I _R	0.250(T _J = 25 °C)	mA
	I _{R(H)}	8.0(T _J = 100 °C)	mA
Thermal Resistance Junction to Ambient (Note 2)	R _{θJA}	206	°C/W
Thermal Resistance Junction to Lead	R _{θJL}	150	°C/W
Junction Temperature Range	T _J	- 65 to + 125	°C
Storage Temperature Range	T _{STG}	- 65 to + 125	°C

Notes :

- (1) Pulse Test : Pulse Width = 300 μs, Duty Cycle ≤ 2%.
- (2) 1 inch square pad size (1 x 0.5 inch for each lead) on FR4 board.

RATING AND CHARACTERISTIC CURVES (MBR0520L)

FIG.1 - DERATING CURVE

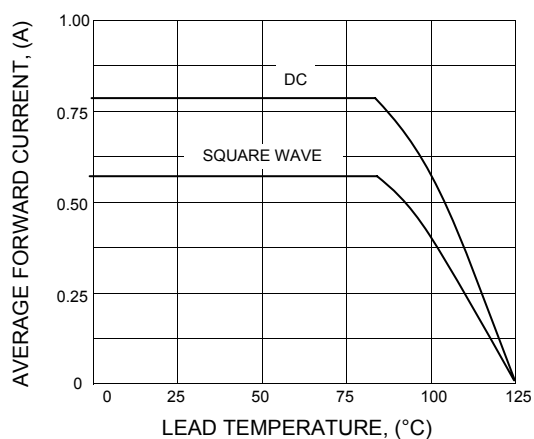


FIG.2 - TYPICAL CAPACITANCE

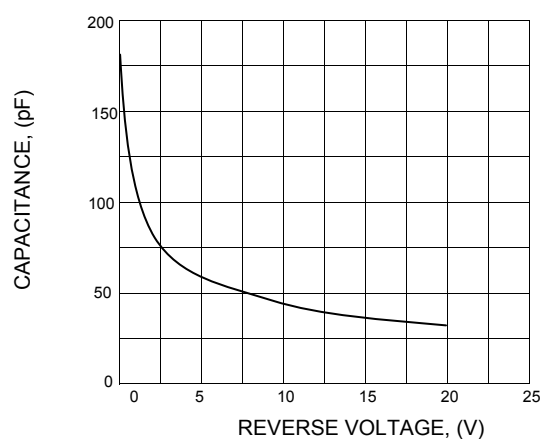


FIG.3 - TYPICAL FORWARD VOLTAGE

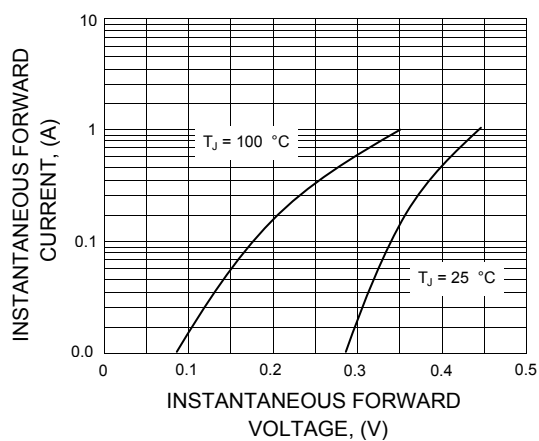


FIG.4 - TYPICAL REVERSE CURRENT

