

MBRS1100

SCHOTTKY BARRIER RECTIFIER

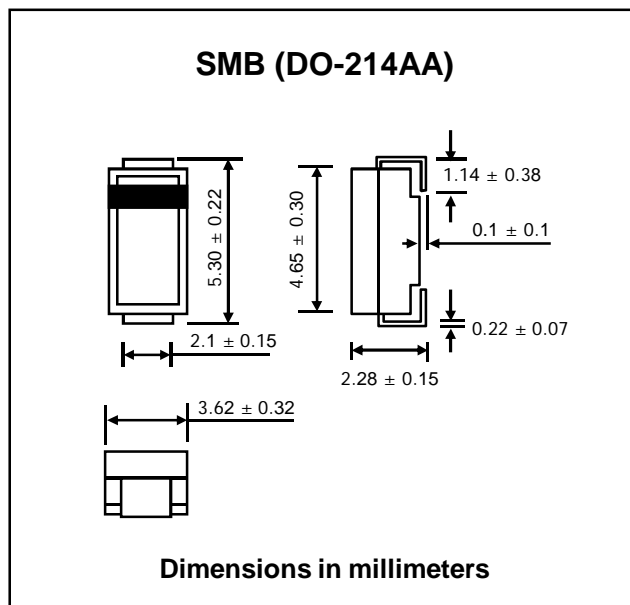
PRV : 100 Volts
Io : 1 Ampere

FEATURES :

- * Very Low Forward Voltage Drop
- * Small Compact Surface Mountable Package
- * Highly Stable Oxide Passivated Junction
- * Guardring for Stress Protection
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : SMB Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.117 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Reverse Voltage	VRRM	100	V
Maximum Working Peak Reverse Voltage	VRWM	100	V
Maximum DC Blocking Voltage	VDC	100	V
Maximum Average Rectified Forward Current	IF(AV)	1.0 (TL = 120°C)	A
		2.0 (TL = 100°C)	
Non-repetitive Peak Surge Current (Surge applied at rated load conditions half wave, single phase, 60Hz)	IFSM	50	A
Maximum Instantaneous Forward Voltage (Note 1) (IF = 1.0 A, Tj = 25°C)	VF	0.75	V
Maximum Instantaneous Reverse Current (Note1) (Rate dc Voltage, Tj = 25°C) (Rate dc Voltage, Tj = 100°C)	IR	0.5	mA
		5.0	
Thermal Resistance - Junction to Lead (TL = 25°C)	RθJL	22	°C/W
Operating Junction Temperature	TJ	- 65 to +150	°C

Note: (1) Pulse Test : Pulse Width = 300µs Duty Cycle ≤ 2%



RATING AND CHARACTERISTIC CURVES (MBR5100)

FIG.1 - CURRENT DERATING (LEAD)

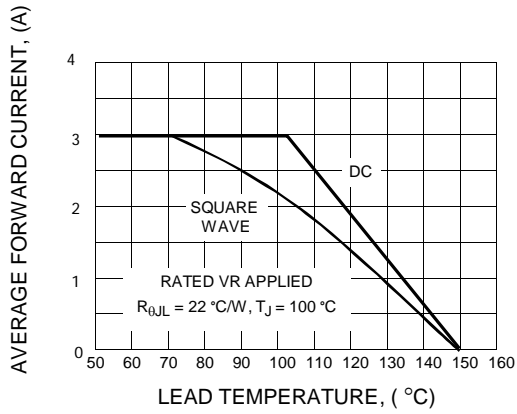


FIG.2 - POWER DISSIPATION

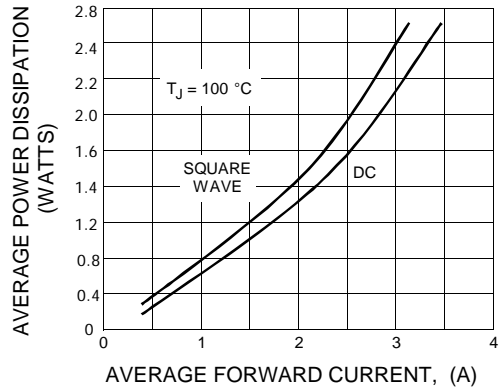


FIG.3 - TYPICAL FORWARD VOLTAGE

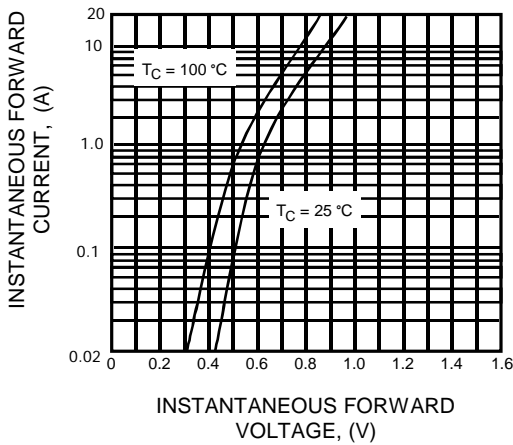


FIG.4 - TYPICAL REVERSE CURRENT

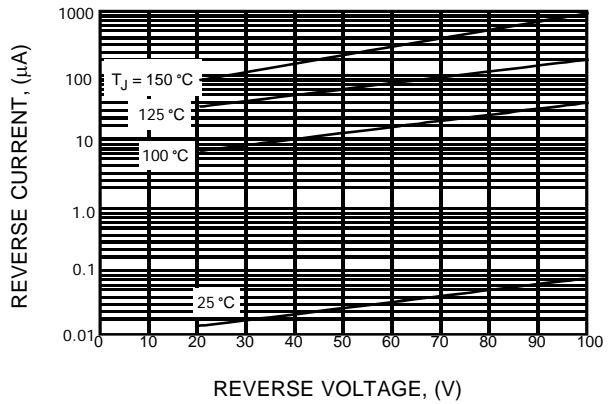


FIG. 5 TYPICAL CAPACITANCE

