

MBRA190

PRV : 90 Volts
I_o : 1.0 Ampere

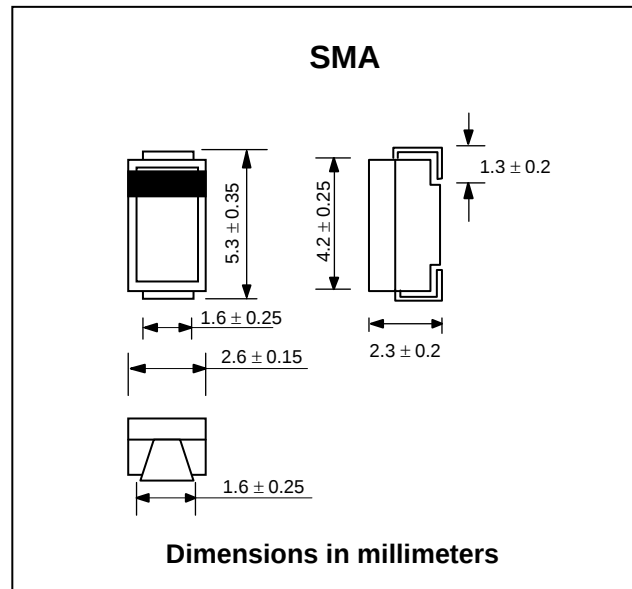
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low forward voltage drop
- * Low cost
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.060 gram (Approximately)

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specific.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	90	V
Maximum RMS Voltage	V _{RMS}	63	V
Maximum DC Blocking Voltage	V _{DC}	90	V
Maximum Average Forward Current T _L = 100 °C	I _{F(AV)}	1.0	A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I _{FSM}	40	A
Maximum Forward Voltage at I _F = 1.0 A	V _F	0.79	V
Maximum Reverse Current at T _a = 25 °C	I _R	0.5	mA
Rated DC Blocking Voltage (Note 1) T _a = 100 °C	I _{R(H)}	5.0	mA
Typical Thermal Resistance	R _{θJL}	15	°C/W
Junction Temperature Range	T _J	- 65 to + 150	°C
Storage Temperature Range	T _{STG}	- 65 to + 150	°C

Note :

(1) Pulse Test : Pulse Width = 300 μs, Duty Cycle = 2%.

RATING AND CHARACTERISTIC CURVES (MBRA190)

FIG.1 - FORWARD CURRENT DERATING CURVE

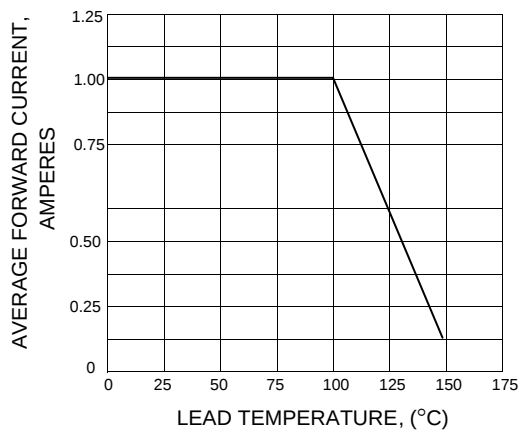


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

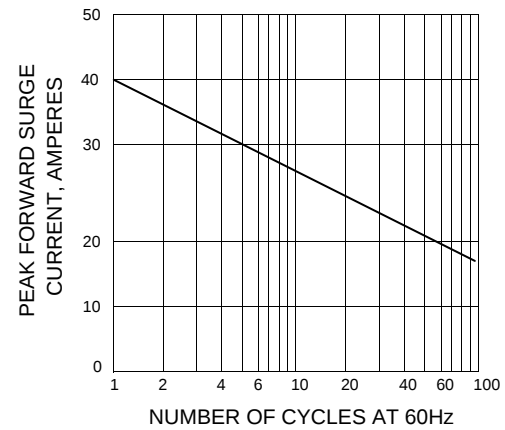


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

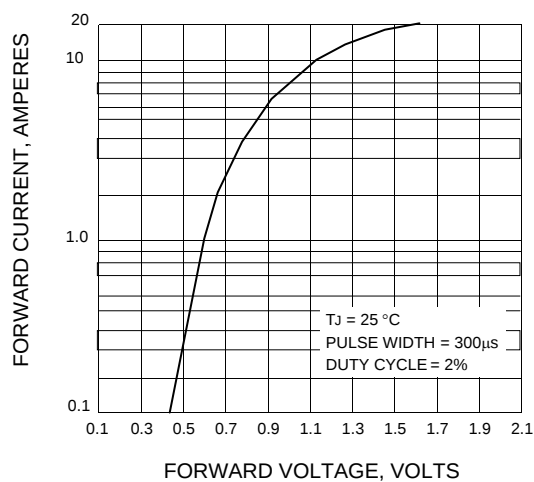


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

