

MBRS360T3

PRV : 60 Volts
Io : 3.0 Amperes

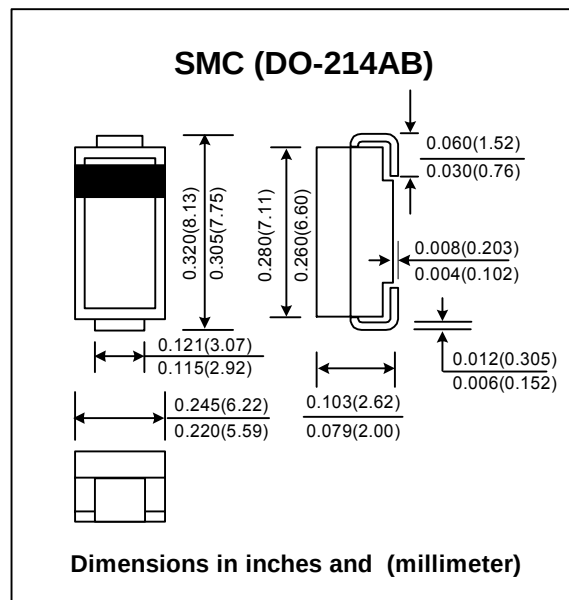
FEATURES :

- * Small Compact Surface Mountable Package
- * Highly Stable Oxide Passivated Junction
- * Excellent Ability to Withstand Reverse Avalanche Energy Transients
- * Guardring for Stress Protection
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : SMC Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.21 gram

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



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	V_{RRM}	60	V
Maximum Working Peak Reverse Voltage	V_{RWM}	60	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Maximum Average Rectified Forward Current @ $T_L = 137\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	3.0	A
Maximum Non-repetitive Peak Surge Current (Surge applied at rated load conditions half wave, single phase ,60 Hz)	I_{FSM}	125	A
Maximum Instantaneous Forward Voltage (Note 1) ($I_F = 3.0\text{ A}$, $T_J = 25\text{ }^{\circ}\text{C}$)	V_F	0.74	V
Maximum Instantaneous Reverse Current (Note1) ($V_R = V_{RRM}$, $T_J = 25\text{ }^{\circ}\text{C}$) ($V_R = V_{RRM}$, $T_J = 100\text{ }^{\circ}\text{C}$)	I_R	0.15	mA
	$I_{R(H)}$	10.0	
Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	164	$^{\circ}\text{C/W}$
Thermal Resistance Junction to Lead (Note 2)	$R_{\theta JL}$	11	$^{\circ}\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 65 to +175	$^{\circ}\text{C}$

Notes :

- (1) Pulse Test : Pulse Width = 300 μs Duty Cycle $\leq 2\%$
- (2) Mounted with minimum recommended pad size, PC Board FR4

RATING AND CHARACTERISTIC CURVES (MBRS360T3)

FIG.1 - CURRENT DERATING

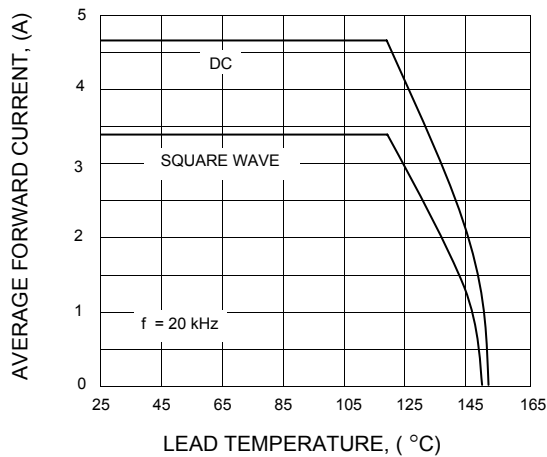


FIG.2 - FORWARD POWER DISSIPATION

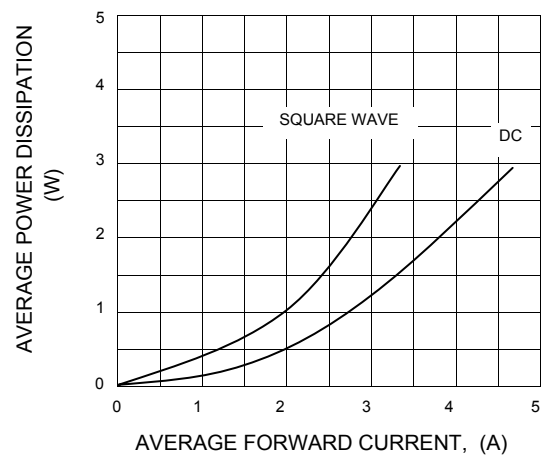


FIG.3 - TYPICAL FORWARD VOLTAGE

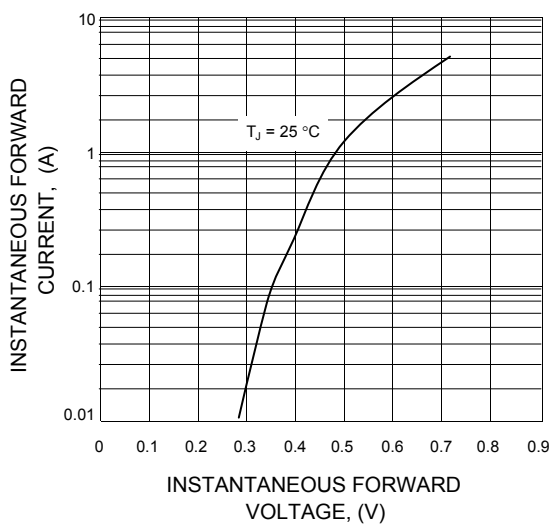


FIG.4 - TYPICAL REVERSE CURRENT

