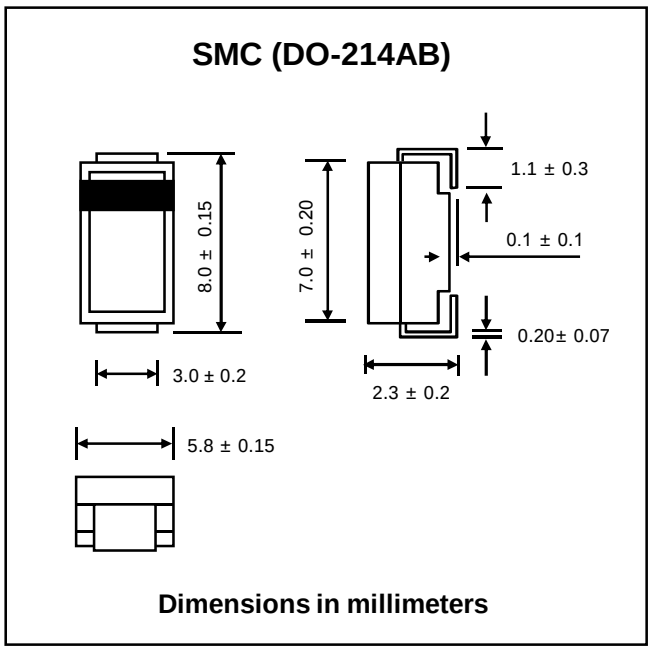
MBRS360T3

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

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 °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 A, T_J = 25 °C)	V_F	0.74	V
Maximum Instantaneous Reverse Current (Note1) (V_R = V_{RRM}, T_J = 25 °C)	I_R	0.15	mA
(V_R = V_{RRM}, T_J = 100 °C)	$I_{R(H)}$	10.0	
Thermal Resistance Junction to Ambient (Note 2)	$R_{\Theta JA}$	164	°C/W
Thermal Resistance Junction to Lead (Note 2)	$R_{\Theta JL}$	11	°C/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 65 to +175	°C

Notes :

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

RATING AND CHARACTERISTIC CURVES (MBRS360T3)

FIG.1 - CURRENT DERATING

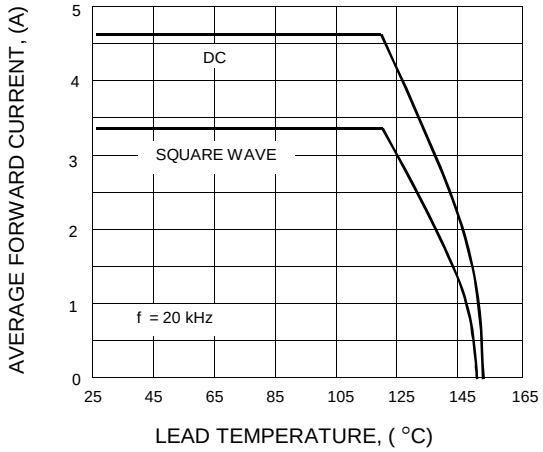


FIG.2 - FORWARD POWER DISSIPATION

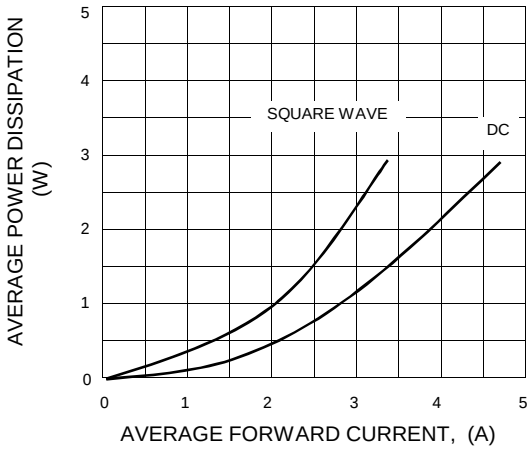


FIG.3 - TYPICAL FORWARD VOLTAGE

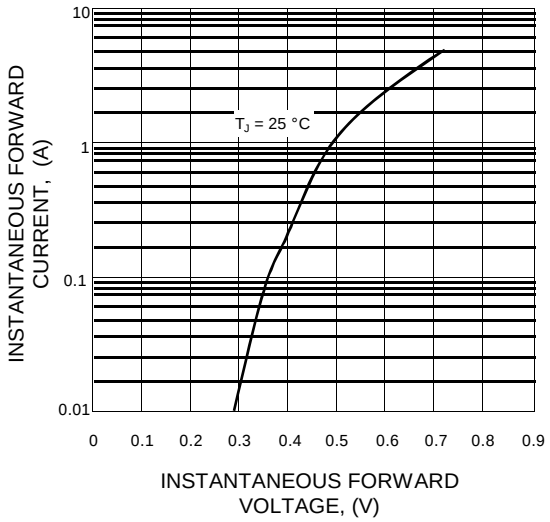


FIG.4 - TYPICAL REVERSE CURRENT