

MBRS330T3, MBRS340T3

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

PRV : 30 - 40 Volts

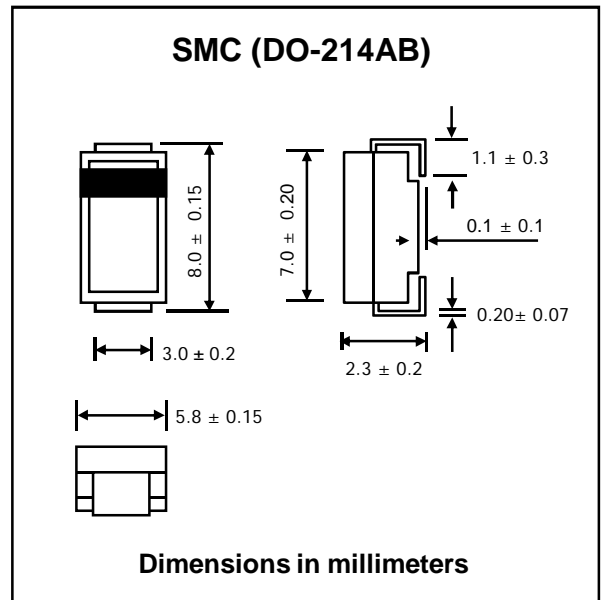
Io : 3.0 Amperes

FEATURES :

- * Very Low Forward Voltage Drop
- * 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	MBRS330T3	MBRS340T3	UNIT
Maximum Repetitive Reverse Voltage	V_{RRM}	30	40	V
Maximum Working Peak Reverse Voltage	V_{RWM}	30	40	V
Maximum DC Blocking Voltage	V_{DC}	30	40	V
Maximum Average Rectified Forward Current	$I_{F(AV)}$	3.0 @ $T_L = 100^\circ\text{C}$		A
		4.0 @ $T_L = 90^\circ\text{C}$		
Maximum Non-repetitive Peak Surge Current (Surge applied at rated load conditions half wave, single phase ,60 Hz)	I_{FSM}	80		A
Maximum Instantaneous Forward Voltage (Note 1) ($I_F = 3.0\text{ A}$, $T_J = 25^\circ\text{C}$)	V_F	0.50	0.525	V
Maximum Instantaneous Reverse Current (Note1)	I_R	2.0 ($T_J = 25^\circ\text{C}$)		mA
	$I_{R(H)}$	20 ($T_J = 100^\circ\text{C}$)		
Thermal Resistance Junction to Lead	$R_{\theta JL}$	11		$^\circ\text{C/W}$
Operating Junction Temperature	T_J	- 65 to +125		$^\circ\text{C}$

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

RATING AND CHARACTERISTIC CURVES (MBR330T3, MBR340T3)

FIG.1 - CURRENT DERATING (CASE)

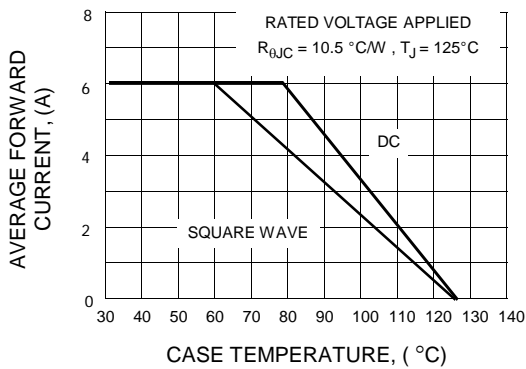


FIG.2 - POWER DISSIPATION

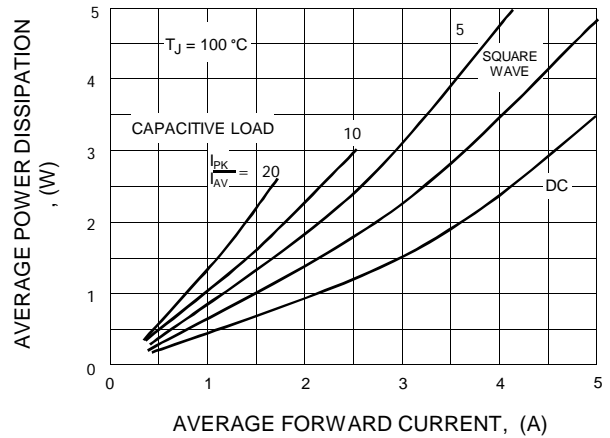


FIG.3 - TYPICAL FORWARD VOLTAGE

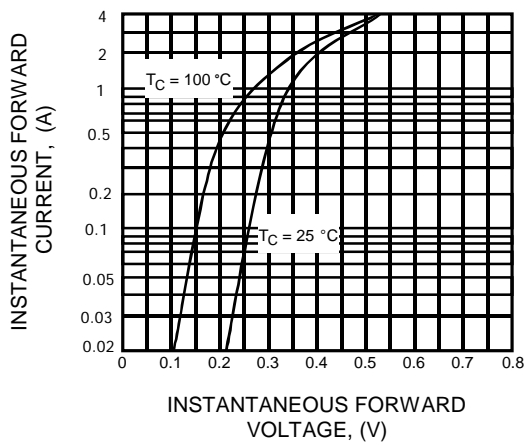


FIG.4 - TYPICAL REVERSE CURRENT

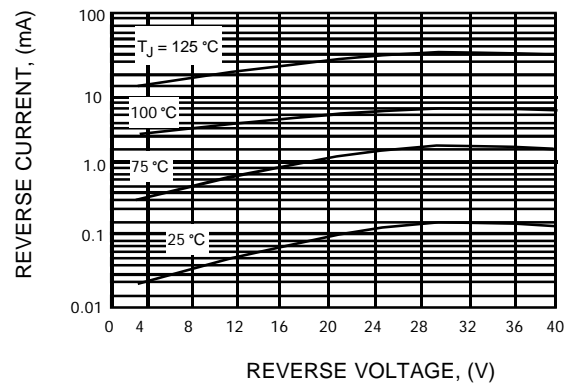


FIG. 5 TYPICAL CAPACITANCE

