

# MBRS330T3, MBRS340T3

PRV : 30 - 40 Volts

Io : 3.0 Amperes

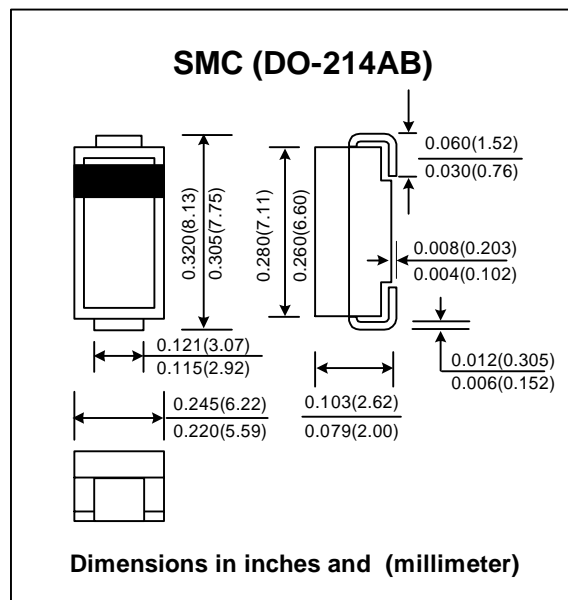
## FEATURES :

- \* 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

# SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



## 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	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 @ $T_L = 100^\circ\text{C}$ 4.0 @ $T_L = 90^\circ\text{C}$		A
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 $\mu\text{s}$  Duty Cycle  $\leq$  2%

## RATING AND CHARACTERISTIC CURVES ( MBR340T3, MBR340T3 )

FIG.1 - CURRENT DERATING (CASE)

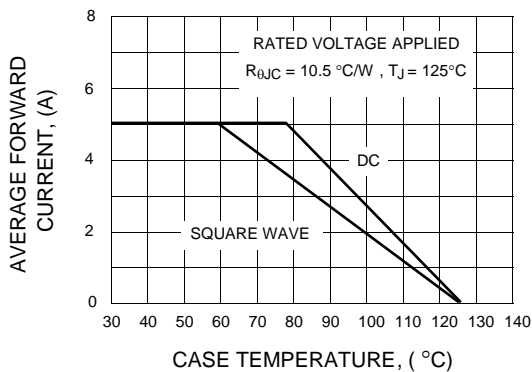


FIG.2 - POWER DISSIPATION

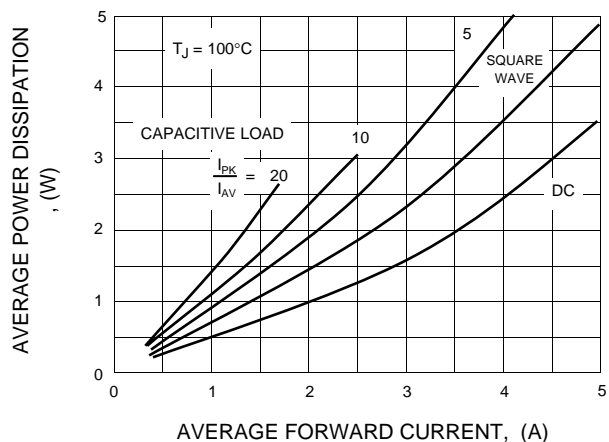


FIG.3 - TYPICAL FORWARD VOLTAGE

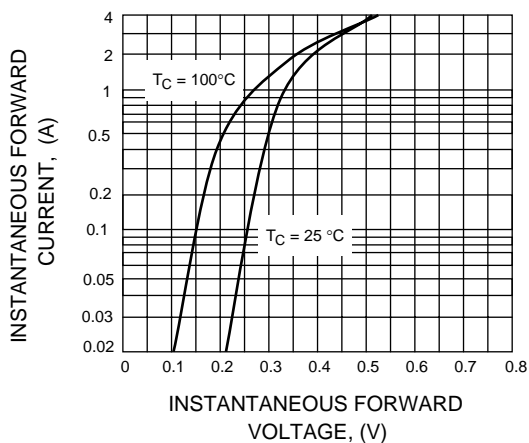


FIG.4 - TYPICAL REVERSE CURRENT

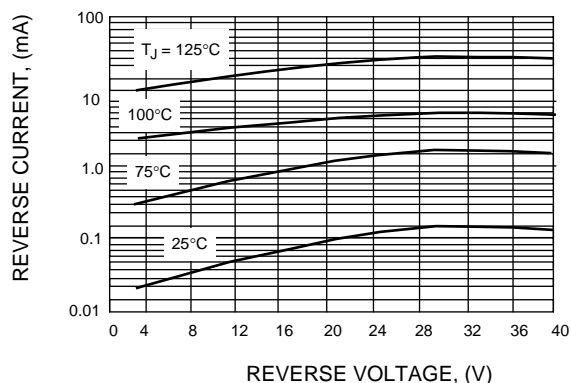


FIG. 5 TYPICAL CAPACITANCE

