

# MBRA340

**PRV : 40 Volts**  
**I<sub>o</sub> : 3.0 Ampere**

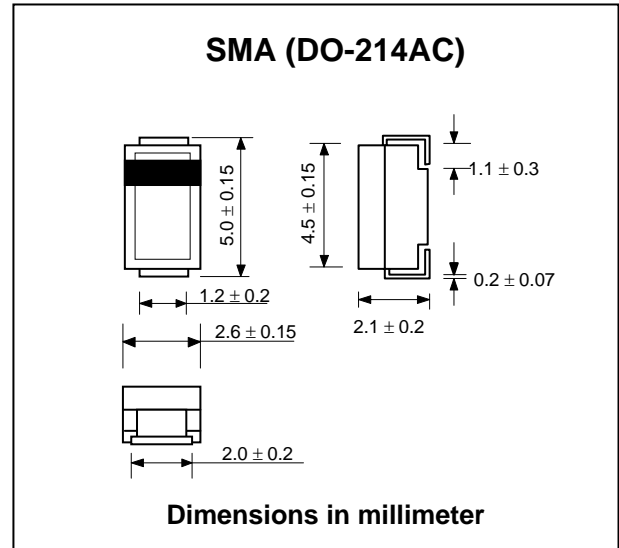
**FEATURES :**

- \* Rectangular package for automated handling
- \* Highly stable oxide passivated junction
- \* Guardring for stress protection
- \* Very low forward voltage drop
- \* **Pb / RoHS Free**

**MECHANICAL DATA :**

- \* Case : SMA Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Lead Formed for Surface Mount
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.067 gram

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specific.

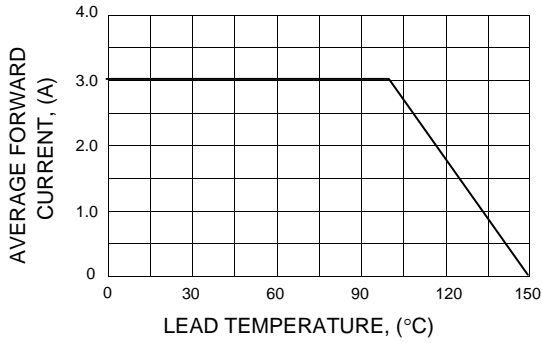
RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	40	V
Working Peak Reverse Voltage	V <sub>RMS</sub>	40	V
DC Blocking Voltage	V <sub>DC</sub>	40	V
Maximum Average Forward Current, T <sub>L</sub> = 100 °C	I <sub>F(AV)</sub>	3.0	A
Non-Repetitive Peak Surge Current, (Surge applied at load condition halfwave, Single phase, 60 Hz)	I <sub>FSM</sub>	100	A
Maximum Instantaneous Forward Voltage (Note 1) ( I <sub>F</sub> = 3.0 A , T <sub>J</sub> = 25 °C )	V <sub>F</sub>	0.45	V
Maximum Instantaneous Reverse Current at V <sub>R</sub> = 40 V	I <sub>R</sub>	0.3 ( T <sub>J</sub> = 25 °C )	mA
	I <sub>R(H)</sub>	15.0 ( T <sub>J</sub> = 100 °C )	mA
Thermal Resistance (Junction to Lead)	R <sub>θJL</sub>	15	°C/W
Thermal Resistance (Junction to Ambient)	R <sub>θJA</sub>	81	°C/W
Operating Junction Temperature	T <sub>J</sub>	- 55 to + 125	°C
Storage/Operating Case Temperature	T <sub>STG</sub> , T <sub>C</sub>	- 55 to + 150	°C

**Note :**

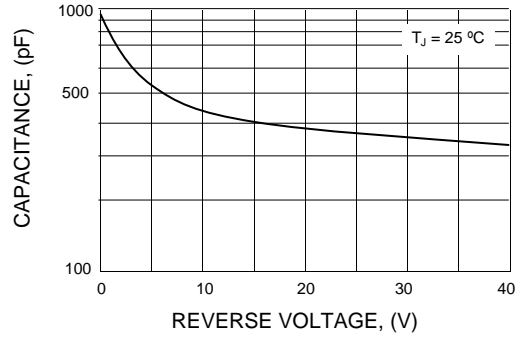
(1) Pulse Test : Pulse Width = 250 μs, Duty Cycle = 2%.

**RATING AND CHARACTERISTIC CURVES ( MBRA340 )**

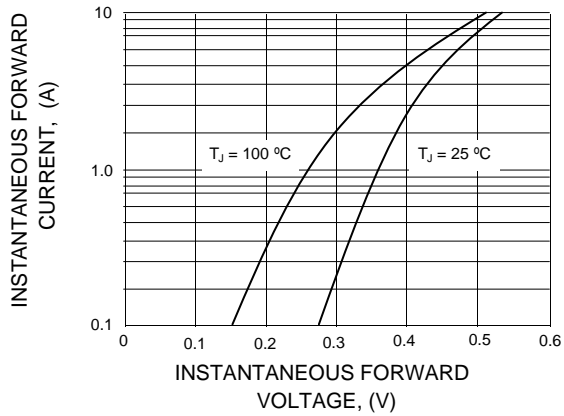
**FIG.1 - CURRENT DERATING,**



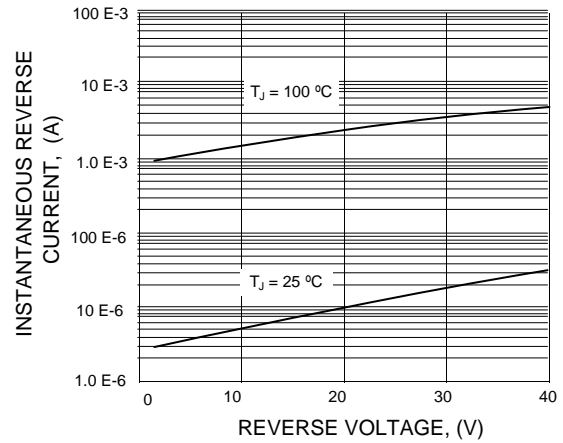
**FIG.2 - CAPACITANCE**



**FIG. 3 - TYPICAL FORWARD CURRENT**



**FIG. 4 - TYPICAL REVERSE CURRENT**



**FIG. 5 - FORWARD POWER DISSIPATION**

