

# ERA83-004

**PRV : 40 Volts**  
**Io : 1.0 Ampere**

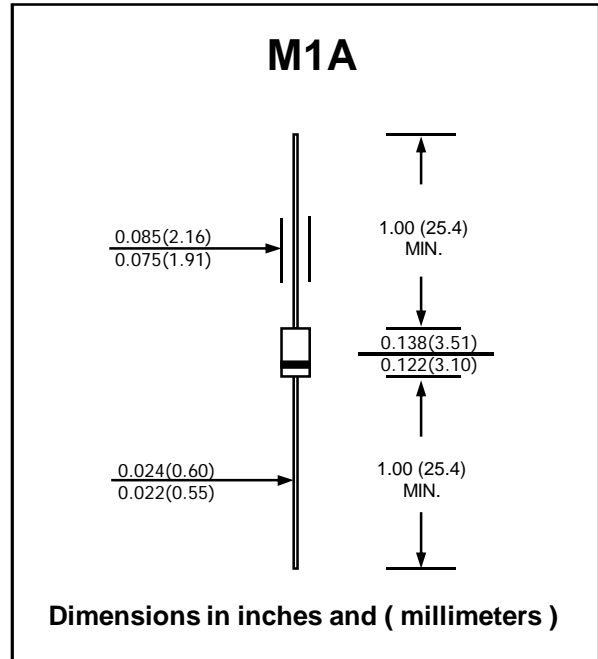
**FEATURES :**

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* High efficiency
- \* Low power loss
- \* Low forward voltage drop
- \* Low cost
- \* Pb / RoHS Free

**MECHANICAL DATA :**

- \* Case : M1A Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.20 gram (approximately)

# SCHOTTKY BARRIER RECTIFIER DIODE



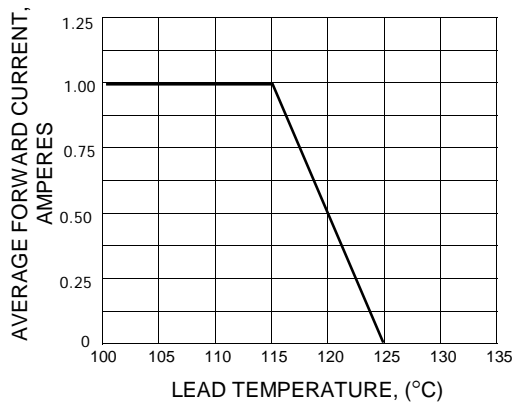
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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%.

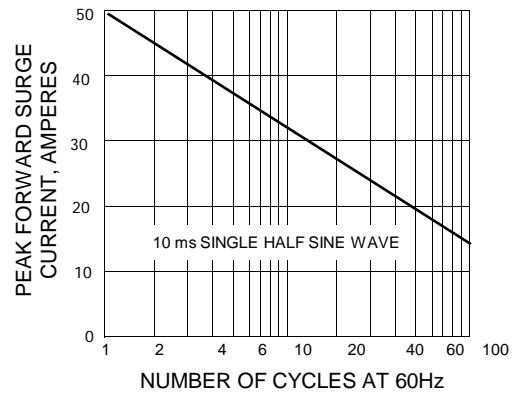
RATING	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	V
Maximum DC Blocking Voltage	$V_{DC}$	40	V
Maximum Average Forward Current $T_L = 115\text{ }^\circ\text{C}$	$I_{F(AV)}$	1.0	A
Maximum Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	50	A
Maximum Forward Voltage at $I_f = 1.0\text{ A}$	$V_F$	0.55	V
Maximum Reverse Current at $V_{RRM}$	$I_R$	2.0	mA
Junction Temperature Range	$T_J$	- 40 to + 125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 40 to + 125	$^\circ\text{C}$

**RATING AND CHARACTERISTIC CURVES ( ERA83-004 )**

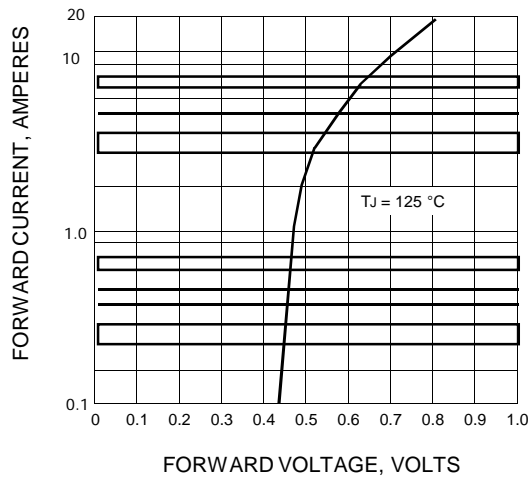
**FIG.1 - FORWARD CURRENT DERATING CURVE**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

