

# Schottky Barrier Rectifier Diode

**ERA83-004**  
Vishaymas High Power Product

## FEATURES

- High current capability
- High surge current capability
- High reliability
- High efficiency
- Low power loss
- Low forward voltage drop
- Low cost

## MECHANICAL DATA

**Case** : M1A Molded plastic

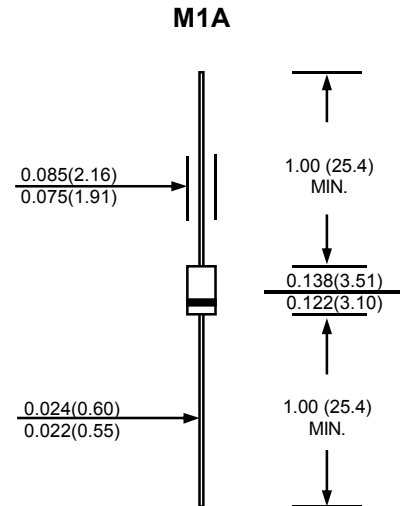
**Epoxy** : UL94V-O rate flame retardant

**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)



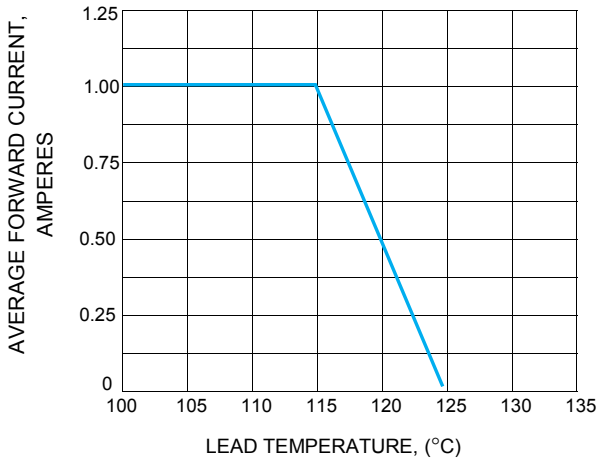
Dimensions in inches and ( millimeters )

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

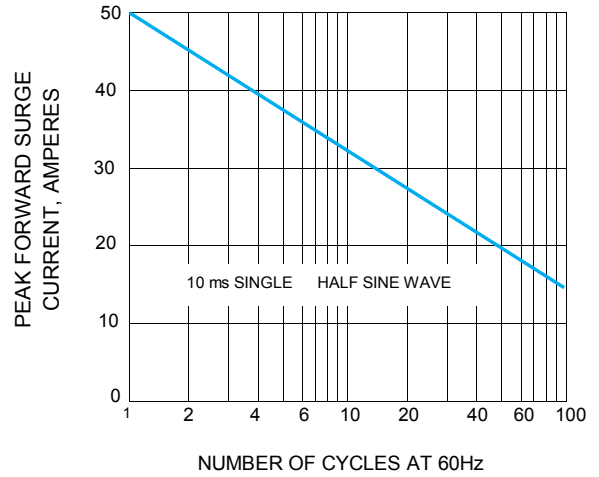
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

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	$^\circ\text{C}$

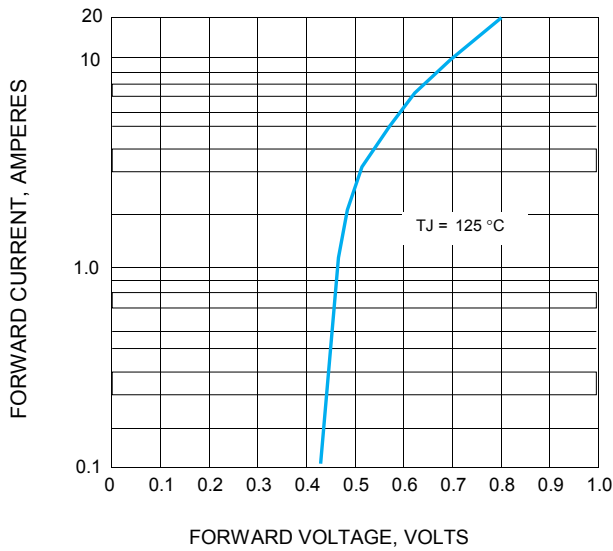
**FIG.1 - FORWARD CURRENT DERATING CURVE**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

