

# ERB83-004

# SCHOTTKY-BARRIER RECTIFIER DIODE

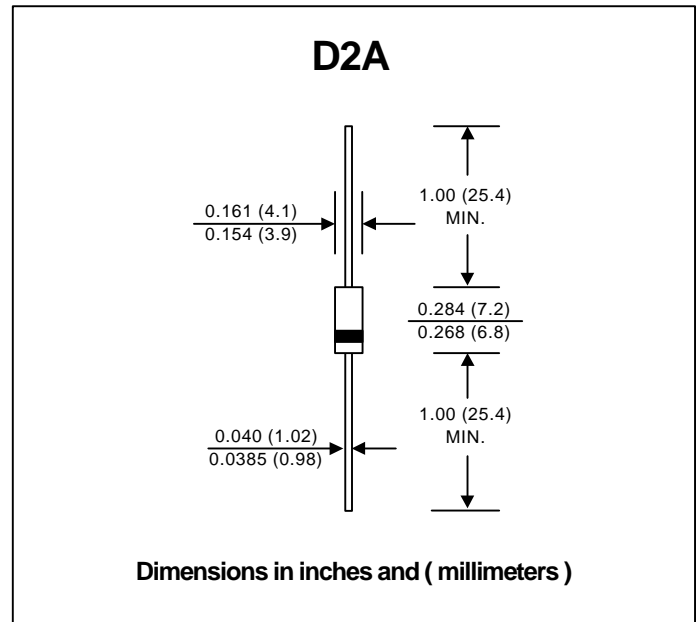
**PRV : 40 Volts**  
**Io : 2.0 Amperes**

**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 : D2A 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 : 0.645 gram



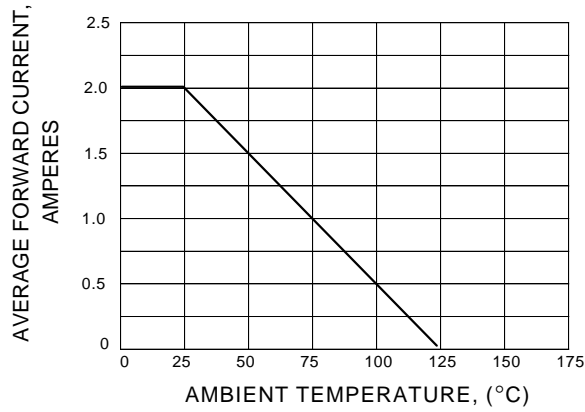
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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%.

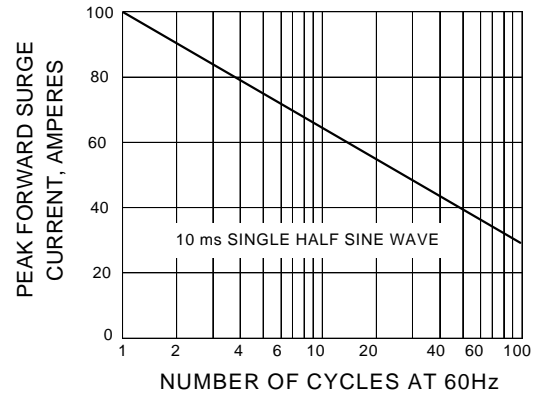
RATING	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	V
Maximum DC Blocking Voltage	$V_{DC}$	40	V
Maximum Average Forward Current	$I_{F(AV)}$	2.0	A
Maximum Non-Repetitive Peak Forward Surge Current (Sin wave, 10ms )	$I_{FSM}$	100	A
Maximum Forward Voltage at $I_F = 2.0$ A	$V_F$	0.55	V
Maximum Reverse Current at $V_R = V_{RRM}$	$I_R$	5.0	mA
Junction Temperature Range	$T_J$	- 40 to + 150	°C
Storage Temperature Range	$T_{STG}$	- 40 to + 150	°C

## RATING AND CHARACTERISTIC CURVES ( ERB83-004 )

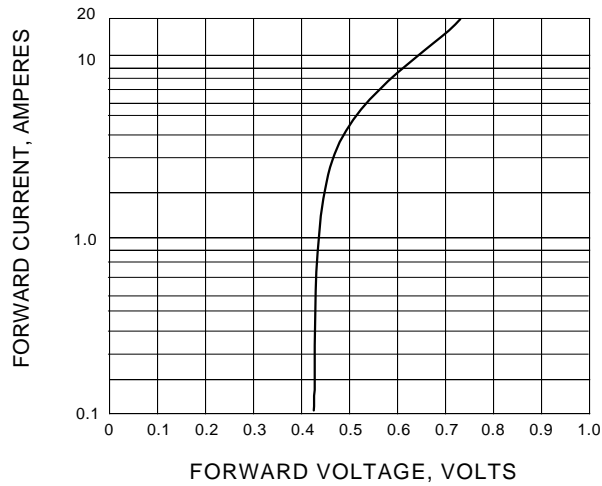
**FIG.1 - FORWARD CURRENT DERATING CURVE**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

