

# ERB12-01 ~ ERB12-10

# SILICON RECTIFIER DIODES

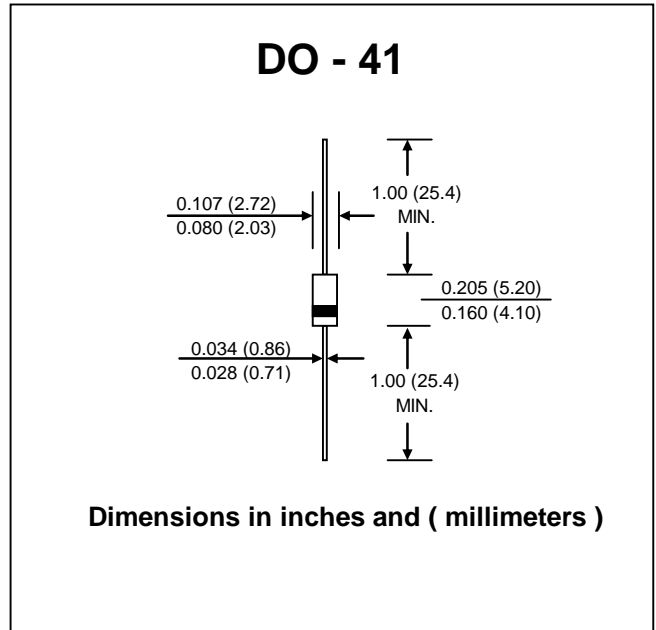
**PRV : 100 - 1000 Volts**  
**Io : 1.0 Ampere**

**FEATURES :**

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop

**MECHANICAL DATA :**

- \* Case : DO-41 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 : 0.34 grams



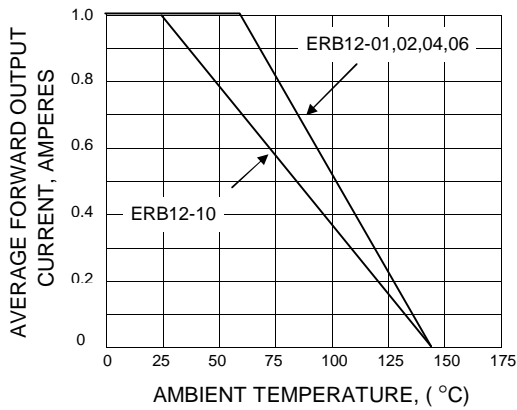
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 50 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

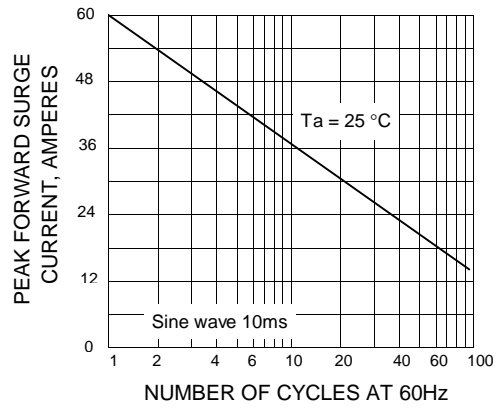
RATING	SYMBOL	ERB 12-01	ERB 12-02	ERB 12-04	ERB 12-06	ERB 12-10	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	70	140	280	420	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	200	400	600	1000	V
Maximum Average Forward Current (See Fig. 1)	I <sub>F(AV)</sub>	1.0					A
Non-Repetitive Peak Forward Surge Current (Sine wave 10 ms at no load)	I <sub>FSM</sub>	60				50	A
Maximum Forward Voltage at I <sub>F</sub> = 2.0 A	V <sub>F</sub>	1.1					V
Maximum Repetitive Peak Reverse Current	I <sub>RRM</sub>	10					μA
Junction Temperature Range	T <sub>J</sub>	- 40 to + 140					°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 140					°C

**RATING AND CHARACTERISTIC CURVES (ERB12-01 ~ ERB12-10)**

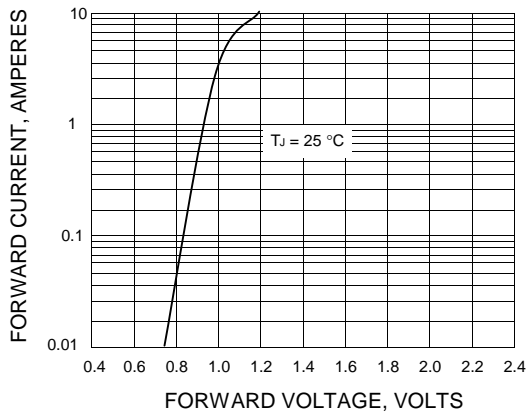
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

