

ERB12-01 ~ ERB12-10

SILICON RECTIFIER DIODES

PRV : 100 - 1000 Volts

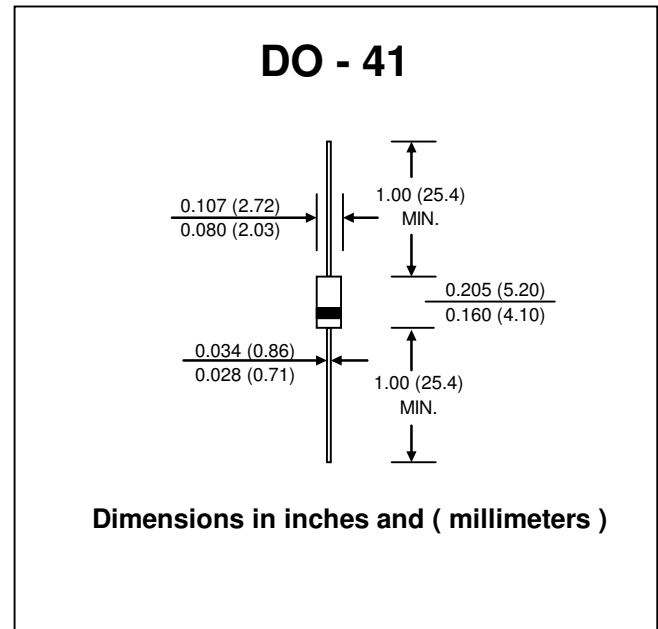
Io : 1.0 Ampere

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_{RRM}	100	200	400	600	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	1000	V
Maximum Average Forward Current (See Fig. 1)	$I_{F(AV)}$	1.0					A
Non-Repetitive Peak Forward Surge Current (Sine wave 10 ms at no load)	I_{FSM}	60					A
Maximum Forward Voltage at $I_F = 2.0$ A	V_F	1.1					V
Maximum Repetitive Peak Reverse Current	I_{RRM}	10					μA
Junction Temperature Range	T_J	- 40 to + 140					°C
Storage Temperature Range	T_{STG}	- 40 to + 140					°C

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

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

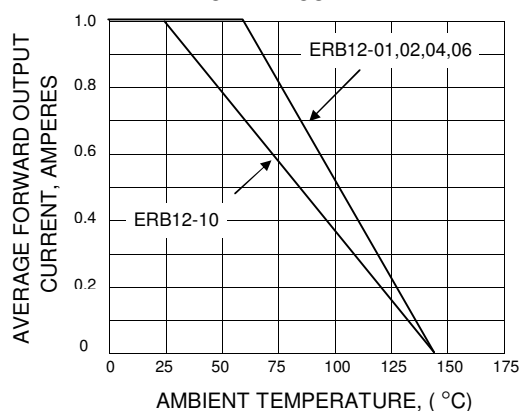


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

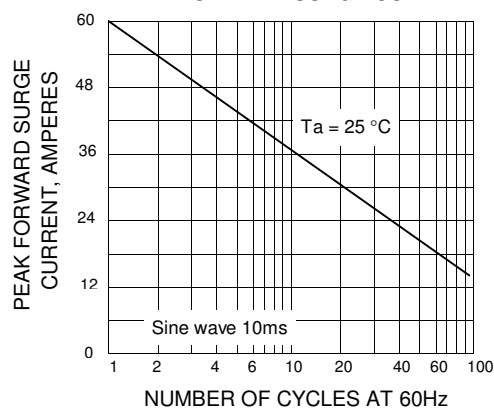


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

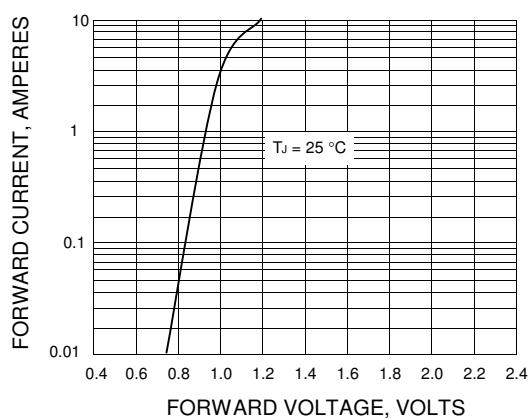


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

