

ERB44-02 ~ ERB44-10

PRV : 200 - 1000 Volts

Io : 1.0 Ampere

FEATURES :

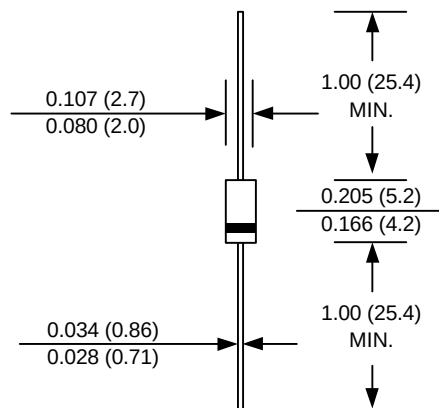
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * **Pb / RoHS Free**

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 : 0.339 gram

FAST RECOVERY RECTIFIER DIODES

DO - 41



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	ERB44-02	ERB44-04	ERB44-06	ERB44-08	ERB44-10	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	160	320	480	640	800	V
Maximum DC Blocking Voltage	VDC	200	400	600	800	1000	V
Maximum Average Forward Current	IF(AV)	1.0					A
Peak Forward Surge Current Sine wave 10ms at no load (Non-repetitive)	IFSM	30					A
Maximum Forward Voltage at IFM = 1.0 A	VF	1.1				1.5	V
Maximum Reverse Current at VRRM	Irrm	10					μA
Maximum Reverse Recovery Time (Note 1)	Trr	0.4					μs
Junction Temperature Range	TJ	-40 ~ +140					°C
Storage Temperature Range	TSTG	-40 ~ +140					°C

Notes :

(1) Reverse Recovery Test Conditions : IF = 100 mA, IR = 100 mA.

RATING AND CHARACTERISTIC CURVES (ERB44-02 // 10)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

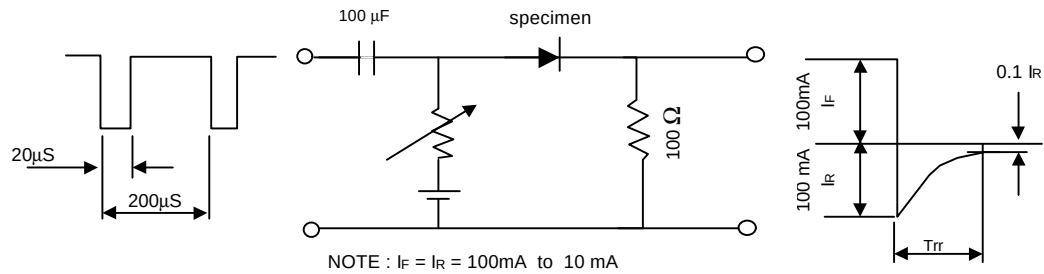


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

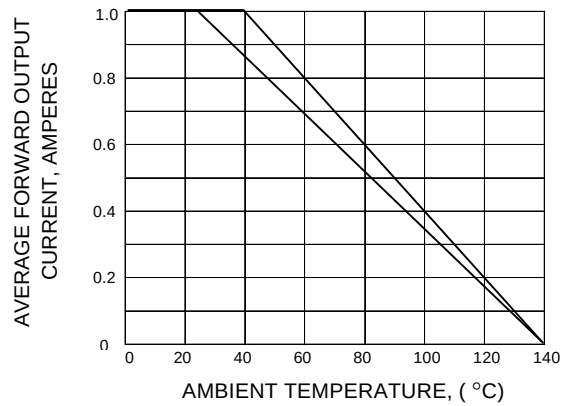


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

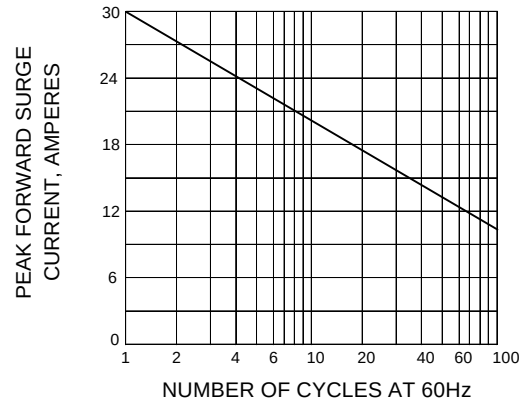


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

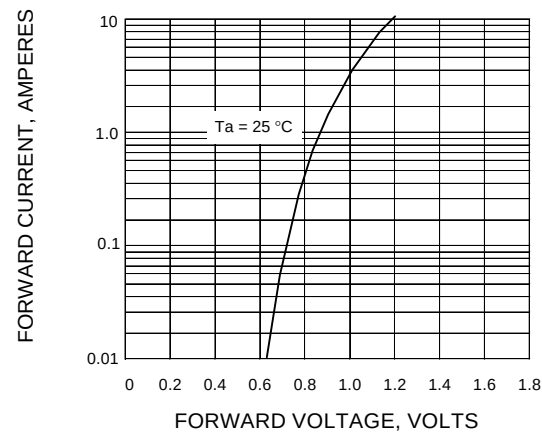


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

