

ERB43-02 ~ ERB43-08

FAST RECOVERY DIODE

PRV : 200 - 800 Volts

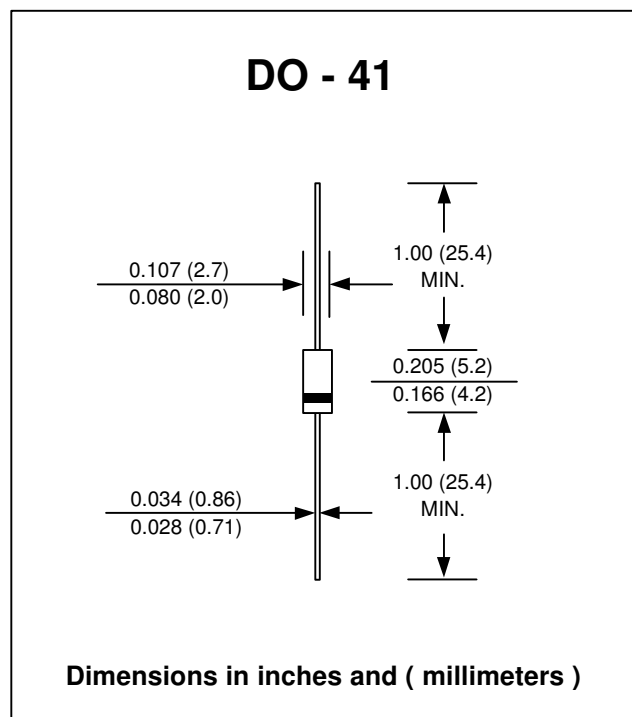
Io : 0.5 Ampere

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



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	ERB 43-02	ERB 43-04	ERB 43-06	ERB 43-08	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	200	400	600	800	V
Maximum DC Blocking Voltage	VDC	160	320	480	640	V
Maximum Average Forward Current , Ta = 40 °C	IF(AV)	0.5				A
Maximum Peak Forward Surge Current (Sine wave, 10 ms)	IFSM	10				A
Maximum Forward Voltage at IF = 0.5 A	VF	1.2				V
Maximum Reverse Current at VRRM	IRRM	10				μA
Maximum Reverse Recovery Time (Note 1)	Trr	0.4				μs
Junction Temperature Range	TJ	- 40 to + 140				°C
Storage Temperature Range	TSTG	- 40 to + 140				°C

Notes :

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

RATING AND CHARACTERISTIC CURVES (ERB43-02 ~ ERB43-08)

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

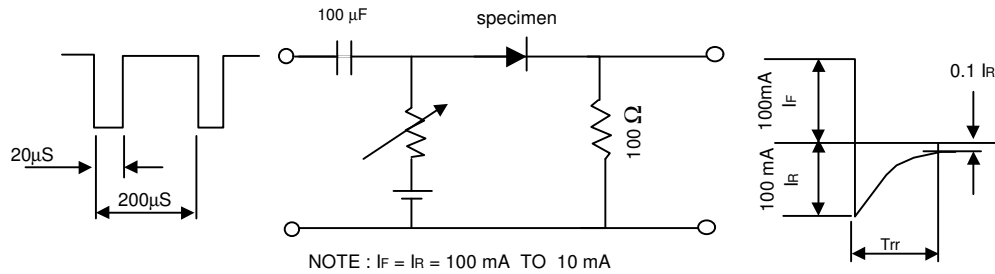


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

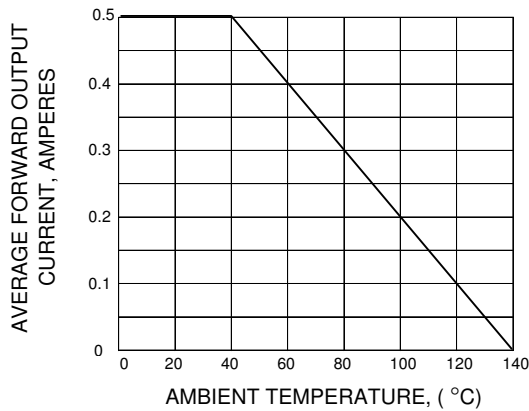


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

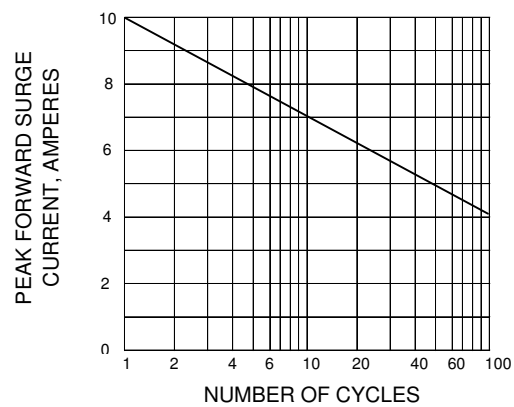


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

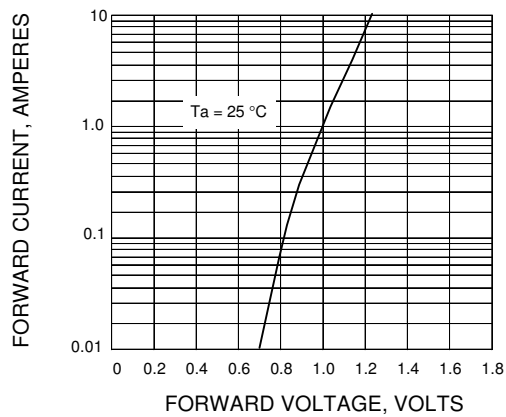


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

