

ERB38-04 ~ ERB38-06

FAST RECOVERY DIODES

PRV : 400 - 600 Volts

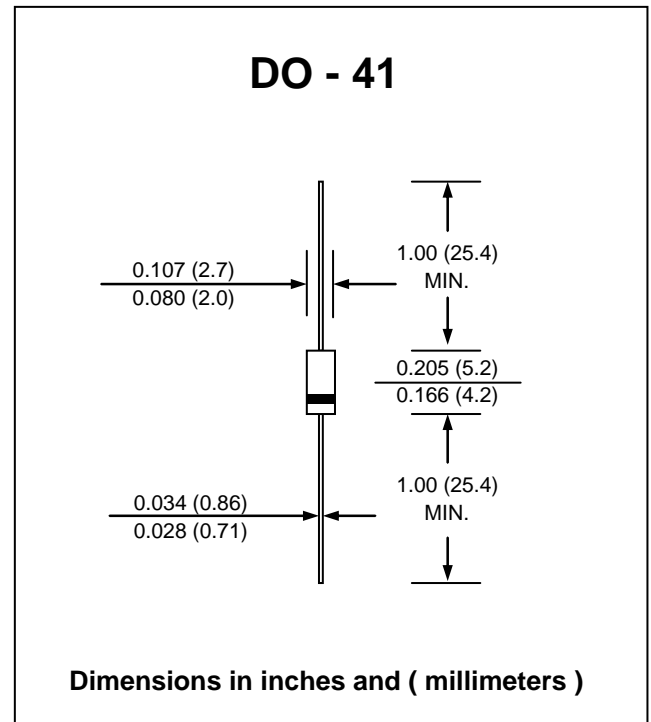
Io : 0.8 Ampere

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 : 0.34 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specific.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	ERB38-04	ERB38-05	ERB38-06	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	400	500	600	V
Maximum DC Blocking Voltage	VDC	320	400	480	V
Maximum Average Forward Current	IF(AV)	0.8			A
Maximum Peak Forward Surge Current (Sine wave, 10 ms)	IFSM	20			A
Maximum Forward Voltage at IF = 0.8 A	VF	2.5			V
Maximum Reverse Current at VRRM	IRRM	50			μA
Maximum Reverse Recovery Time (Note 1)	Trr	0.05			μs
Junction Temperature Range	TJ	- 40 to + 150			°C
Storage Temperature Range	TSTG	- 40 to + 150			°C

Note :

(1) Reverse Recovery Test Conditions : IF = 100 mA, IR = 200 mA.

RATING AND CHARACTERISTIC CURVES (ERB38-04 ~ ERB38-06)

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

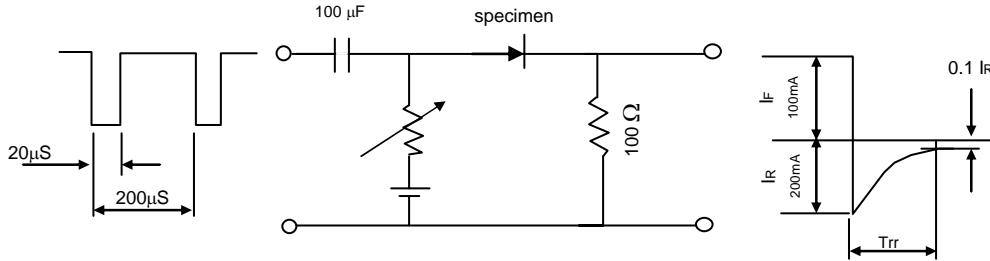


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

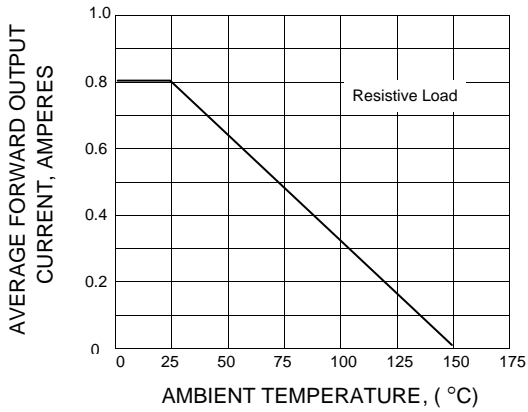


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

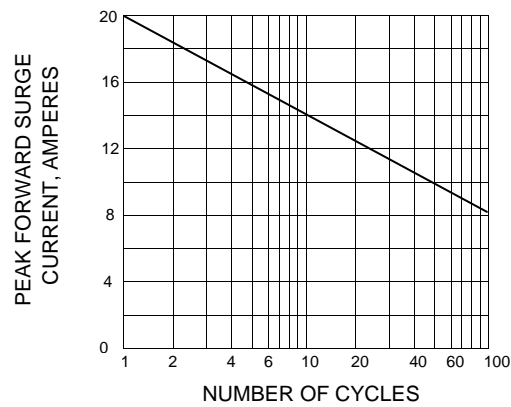


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

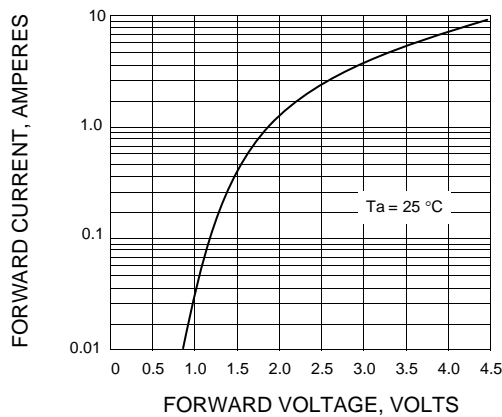


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

