Certificate Number: Q10561

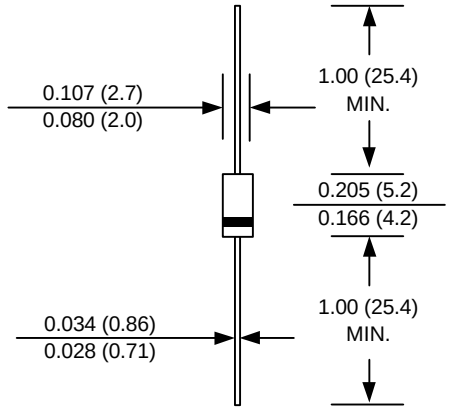
Certificate Number: E17276

ERB44-02 ~ ERB44-10

FAST RECOVERY RECTIFIER DIODES

PRV : 200 - 1000 Volts
Io : 1.0 Ampere

DO - 41



Dimensions in inches and (millimeters)

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	ERB44-02	ERB44-04	ERB44-06	ERB44-08	ERB44-10	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	160	320	480	640	800	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	1.0					A
Peak Forward Surge Current Sine wave 10ms at no load (Non-repetitive)	I_{FSM}	30					A
Maximum Forward Voltage at I_{FM} = 1.0 A	V_F	1.1				1.5	V
Maximum Reverse Current at V_{RRM}	I_{RRM}	10					µA
Maximum Reverse Recovery Time (Note 1)	Trr	0.4					µs
Junction Temperature Range	T_J	-40 ~ +140					°C
Storage Temperature Range	T_{STG}	-40 ~ +140					°C

Notes :

(1) Reverse Recovery Test Conditions : I_F = 100 mA, I_R = 100 mA.

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

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

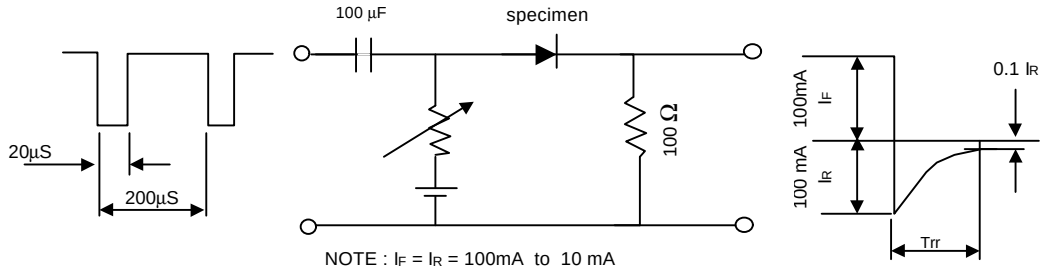


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

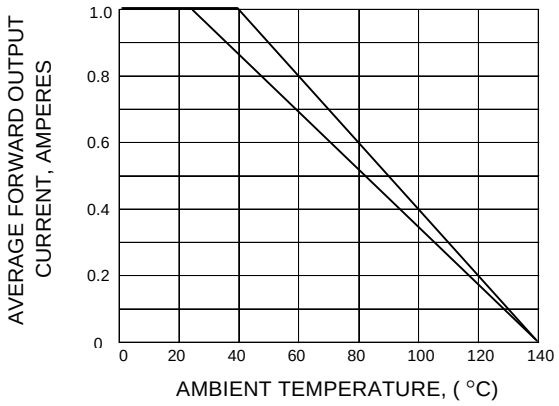


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

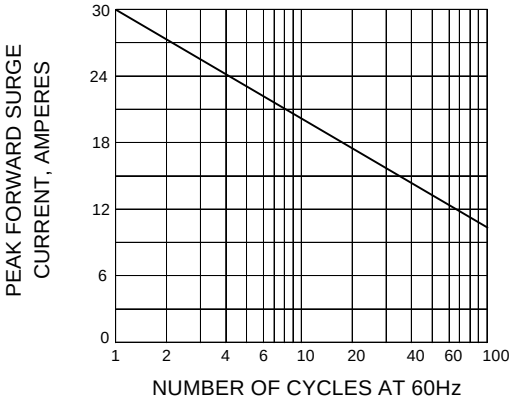


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

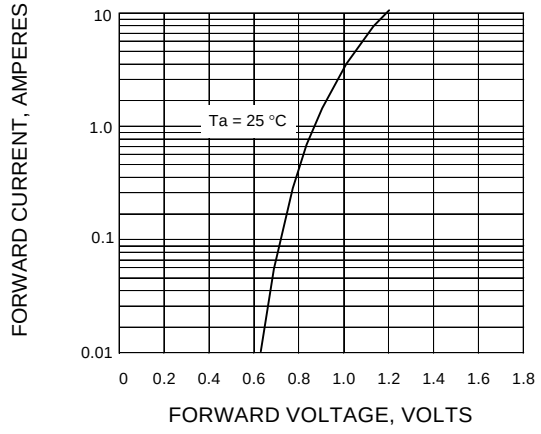


FIG.5 - TYPICAL REVERSE CHARACTERISTICS