

# ERB44-02 ~ ERB44-10

**PRV : 200 - 1000 Volts**

**Io : 1.0 Ampere**

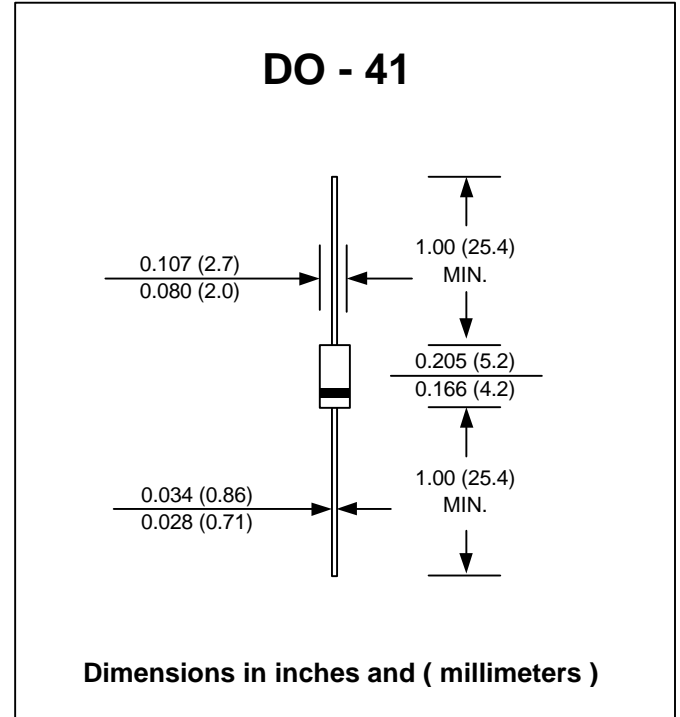
## FEATURES :

- \* 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



## 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%.

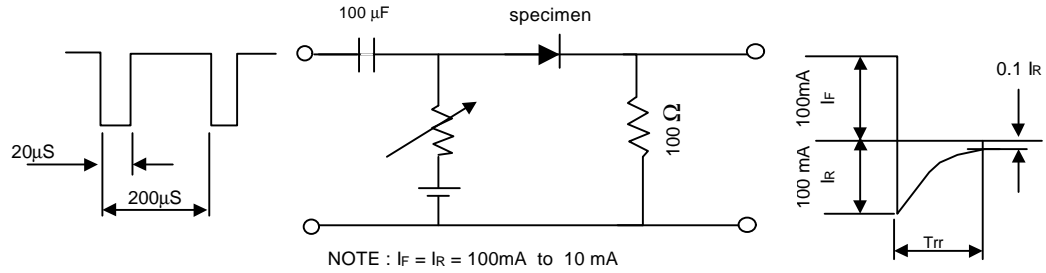
RATING	SYMBOL	ERB44-02	ERB44-04	ERB44-06	ERB44-08	ERB44-10	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	160	320	480	640	800	V
Maximum DC Blocking Voltage	VDC	200	400	600	800	1000	V
Maximum Average Forward Current	IF(AV)	1.0					A
Peak Forward Surge 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 :

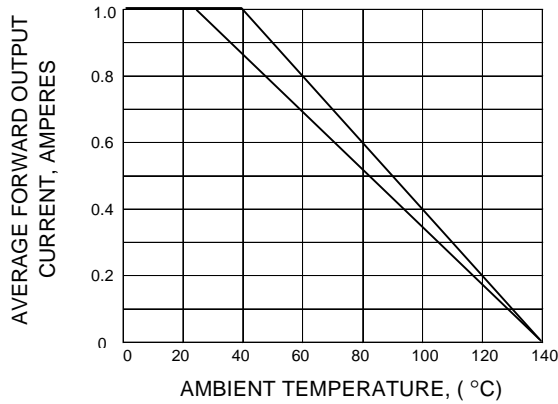
( 1 ) Reverse Recovery Test Conditions : IF = 100 mA, IR = 100 mA.

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

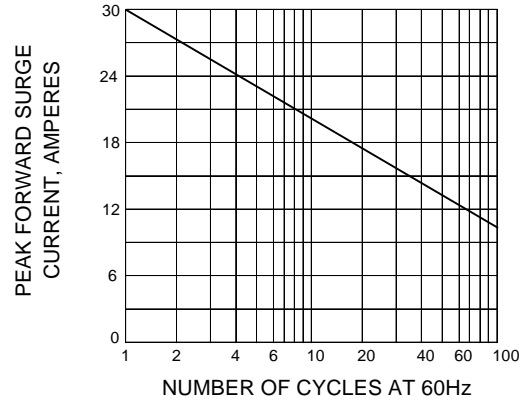
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



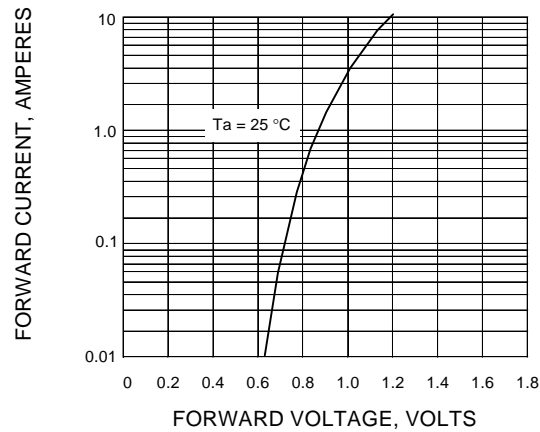
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

