

# ERC91-02

**PRV : 200 Volts**  
**Io : 3 Amperes**

### FEATURES :

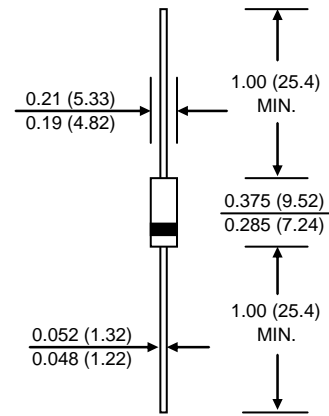
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : DO-201AD 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 : 1.16 grams

## FAST RECOVERY DIODE

### DO-201AD



**Dimensions in inches and ( millimeters )**

## 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%.

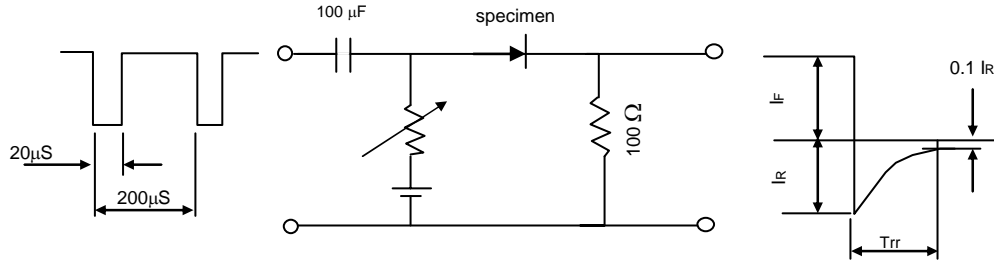
RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	200	V
Maximum DC Blocking Voltage	VR(DC)	160	V
Maximum Average Forward Current	IF(AV)	3.0	A
Maximum Non-repetitive Peak Forward Surge Current ( Sine wave, 10 ms )	IFSM	50	A
Maximum Forward Voltage at IF = 3.0 A	VF	0.95	V
Maximum Reverse Current at VRRM	IRRM	100	µA
Maximum Reverse Recovery Time ( Note 1 )	Trr	0.035	µs
Junction Temperature Range	TJ	- 40 to + 150	°C
Storage Temperature Range	TSTG	- 40 to + 150	°C

### Notes :

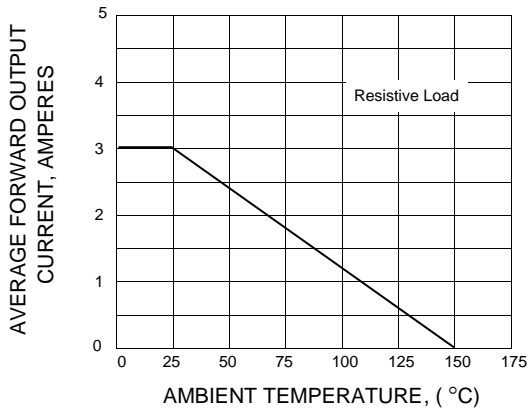
( 1 ) Reverse Recovery Test Conditions : If = 100 mA, Ir = 200 mA.

## RATING AND CHARACTERISTIC CURVES ( ERC91-02 )

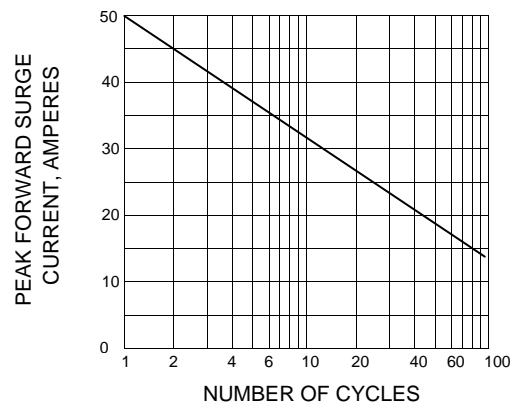
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



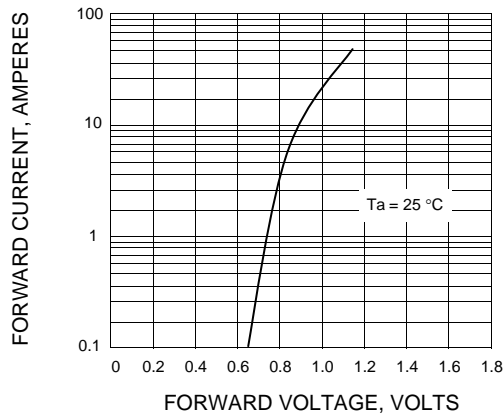
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

