

# ERC84-009

**PRV : 90 Volts**  
**I<sub>o</sub> : 3.0 Amperes**

## FEATURES :

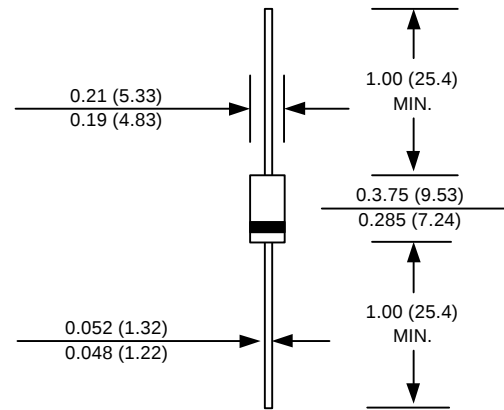
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

## 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 : 1.1 gram

# SCHOTTKY-BARRIER RECTIFIER DIODES

## DO-201AD



**Dimensions in inches and ( millimeters )**

## 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%.

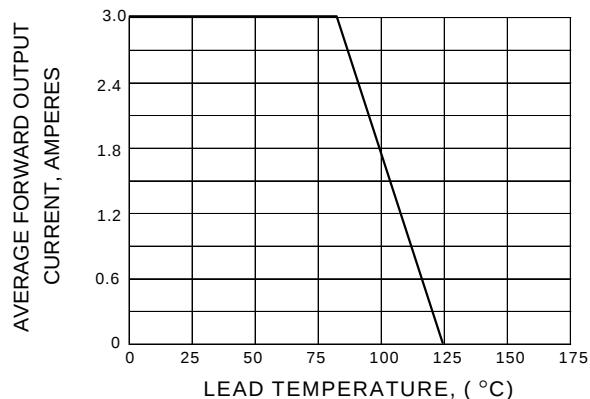
| RATING                                                                                 | SYMBOL             | VALUE         | UNIT |
|----------------------------------------------------------------------------------------|--------------------|---------------|------|
| Maximum Recurrent Peak Reverse Voltage                                                 | V <sub>RRM</sub>   | 90            | V    |
| Maximum DC Blocking Voltage                                                            | V <sub>DC</sub>    | 72            | V    |
| Maximum Average Forward Current T <sub>L</sub> = 85 °C (Note 1)                        | I <sub>F(AV)</sub> | 3.0           | A    |
| Maximum Peak Forward Surge Current single half sine wave<br>Superimposed on rated load | I <sub>FSM</sub>   | 80            | A    |
| Maximum Forward Voltage at I <sub>F</sub> = 3.0 A                                      | V <sub>F</sub>     | 0.8           | V    |
| Maximum Reverse Current at V <sub>RRM</sub> (T <sub>a</sub> = 25 °C)                   | I <sub>RRM</sub>   | 0.5           | mA   |
| Junction Temperature Range                                                             | T <sub>J</sub>     | - 40 to + 125 | °C   |
| Storage Temperature Range                                                              | T <sub>STG</sub>   | - 40 to + 125 | °C   |

## Notes :

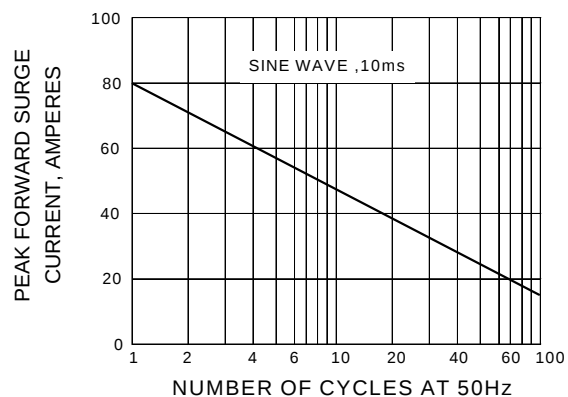
(1) Square wave duty 1/2

## RATING AND CHARACTERISTIC CURVES ( ERC84-009 )

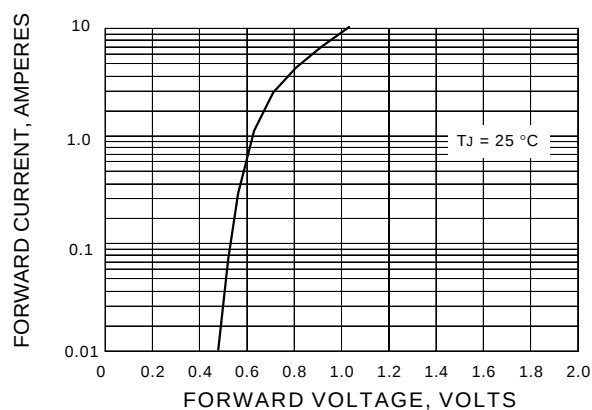
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

