# MR3230L

# AUTOMOTIVE TRANSIENT SUPPRESSOR DIODE

## $V_{BR}$ : 30 Volts
## Io : 32 Amperes

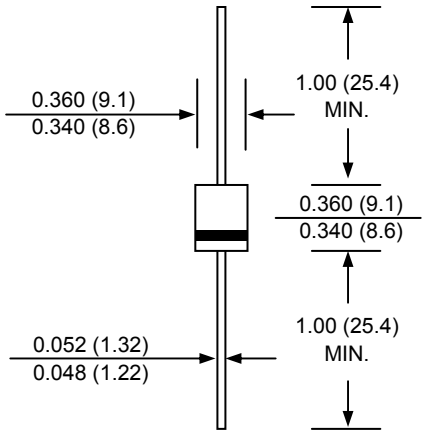
### FEATURES :

* Avalanche Voltage 38 to 42 Volts
* High Power capability
* Increased Capacity by Parallel Operation
* Pb / RoHS Free

### MECHANICAL DATA :

* Case : 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 : 2.049 grams

**D6**




**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 Working Peak Reverse Voltage | $V_{RWM}$ | 30 | V |
| Maximum DC Blocking Voltage | $V_R$ | 30 | V |
| Minimum Breakdown Voltage ( $I_R$ = 100 mA, Tc = 25 °C ) (1) | $V_{BR(min)}$ | 38 | V |
| Maximum Breakdown Voltage ( $I_R$ = 100 mA, Tc = 25 °C ) (1) | $V_{BR(max)}$ | 42 | V |
| Maximum Average Rectified Forward Current ( Single Phase, Resistive Load, 60 Hz, Tc = 150 °C ) | $I_{F(AV)}$ | 32 | A |
| Maximum Repetitive Peak Reverse Surge Current ( Time Constant = 10 ms, Duty Cycle ≤ 1%, Tc = 25 °C ) | $I_{RSM}$ | 77 | A |
| Maximum Instantaneous Forward Voltage ($I_F$ =100 A , Tc = 150 °C) (1) | $V_F$ | 1.1 | V |
| Maximum Reverse Current ( $V_R$ = 30 V, Tc = 25 °C ) | $I_R$ | 1.0 | µA |
| Maximum Reverse Current ( $V_R$ = 30 V, Tc = 150 °C ) | $I_R$ | 500 | µA |
| Typical Thermal Resistance Junction to Case | $R_{\Theta JC}$ | 0.8 | °C/W |
| Junction Temperature Range | $T_J$ | - 65 to + 175 | °C |
| Storage Temperature Range | $T_{STG}$ | - 65 to + 175 | °C |

**Note** : (1) Pulse Test : Pulse Width ≤ 300ms, Duty Cycle ≤ 2%.