

# MR2540L

**V<sub>BR</sub> : 20 Volts**  
**I<sub>o</sub> : 50 Amperes**

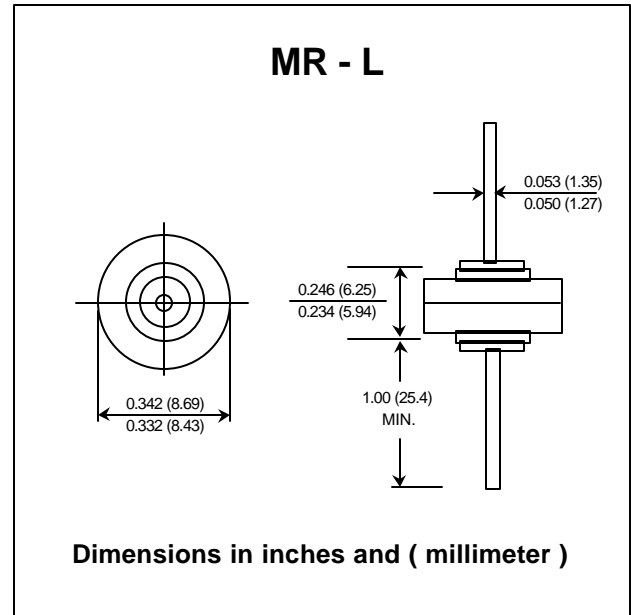
## FEATURES :

- \* Avalanche Voltage 24 to 32 Volts
- \* High Power capability
- \* Increased Capacity by Parallel Operation

## MECHANICAL DATA :

- \* Case : Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Cathode polarity band
- \* Mounting position : Any
- \* Weight : 2.69 grams

# AUTOMOTIVE TRANSIENT SUPPRESSORS



## 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 DC Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	20	Volts
Maximum Working Peak Reverse Voltage	V <sub>RWM</sub>	20	Volts
Maximum DC Blocking Voltage	V <sub>R</sub>	20	Volts
Maximum Breakdown Voltage ( I <sub>R</sub> = 100 mA, T <sub>c</sub> = 25°C ) (1)	V <sub>BR(max)</sub>	32	Volts
Minimum Breakdown Voltage ( I <sub>R</sub> = 100 mA, T <sub>c</sub> = 25°C ) (1)	V <sub>BR(min)</sub>	24	Volts
Average Rectified Forward Current ( Single Phase, Resistive Load, 60 Hz, T <sub>c</sub> = 150 °C )	I <sub>F(AV)</sub>	50	Amps.
Maximum Repetitive Peak Reverse Surge Current ( Time Constant = 10 ms, Duty Cycle ≤ 1%, T <sub>c</sub> = 25 °C )	I <sub>RSM</sub>	150	Amps.
Maximum Non-Repetitive Peak Surge Current Surge Supplied at Rated Load Conditions, Halfwave, Single Phase	I <sub>FSM</sub>	800	Amps.
Maximum Instantaneous Forward Voltage ( I <sub>F</sub> = 100 Amps. T <sub>c</sub> = 25 °C ) (1)	V <sub>F</sub>	1.1	Volts.
Maximum Reverse Current ( V <sub>R</sub> = 20 Volts, T <sub>c</sub> = 25 °C )	I <sub>R</sub>	200	nA
Typical Thermal Resistance Junction to Case	R <sub>θJC</sub>	0.8	°C/W
Junction Temperature Range	T <sub>J</sub>	- 65 to + 175	°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175	°C

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