



MR2540

AUTOMOTIVE TRANSIENT SUPPRESSORS

V_{BR} : 20 Volts

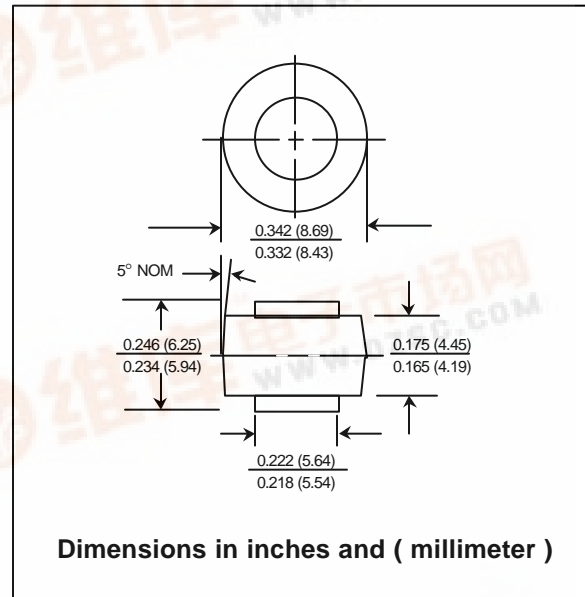
I_o : 50 Amperes

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
- * Terminals : Terminal are readily solderable
- * Polarity : Cathode polarity band
- * Mounting position : Any
- * Weight : 1.8 grams



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 _{RRM}	20	Volts
Maximum Working Peak Reverse Voltage	V _{RWM}	20	Volts
Maximum DC Blocking Voltage	V _R	20	Volts
Maximum Breakdown Voltage (I _R = 100 mA, T _c = 25 °C) (1)	V _{BR(max)}	32	Volts
Minimum Breakdown Voltage (I _R = 100 mA, T _c = 25 °C) (1)	V _{BR(min)}	24	Volts
Average Rectified Forward Current (Single Phase, Resistive Load, 60 Hz, T _c = 150 °C)	I _{F(AV)}	50	Amps.
Maximum Repetitive Peak Reverse Surge Current (Time Constant = 10 ms, Duty Cycle ≤ 1%, T _c = 25 °C)	I _{RSM}	150	Amps.
Maximum Non-Repetitive Peak Surge Current Surge Supplied at Rated Load Conditions, Halfwave, Single Phase	I _{FSM}	800	Amps.
Maximum Instantaneous Forward Voltage (I _F = 100 Amps. T _c = 25 °C) (1)	V _F	1.1	Volts.
Maximum Reverse Current (V _R = 20 Volts, T _c = 25 °C)	I _R	200	nA
Typical Thermal Resistance Junction to Case	R _{θJC}	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 ≤ 300μs, Duty Cycle ≤ 2%.