

MR2500 - MR2512

PRV : 50 - 1200 Volts
I_o : 25 Amperes

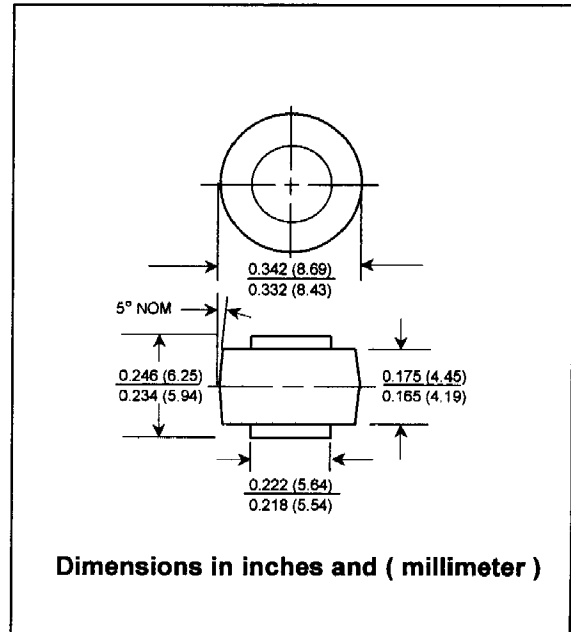
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop

MECHANICAL DATA :

- * Case : Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Terminals : Terminal are readily solderable
- * Polarity : Cathode polarity band
- * Mounting position : Any
- * Weight : 1.624 grams

AUTOMOTIVE RECTIFIER DIODES



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%.

Characteristic	Symbol	MR2500	MR2501	MR2502	MR2504	MR2506	MR2510	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	1000	Volts
Non-Repertitive Peak Reverse Voltage (Halfwave, single phase, 60 Hz peak)	V _{RSM}	60	120	240	480	720	1200	Volts
Average Rectified Forward Current (Single phase, resistive load, 60 Hz, T _C = 150°C)	I _O	25						Amps
Non-Repertitive Peak Surge Current (Surge applied at rated load conditions, halfwave, single phase, 60 Hz)	I _{FSM}	400 (for 1 cycle)						Amps
Operating and Storage Junction Temperature Range	T _J , T _{stg}	- 65 to +175						°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case (Single Side Cooled)	R _{θJC}	1.0	°C/W

ELECTRICAL CHARACTERISTICS

Characteristics and Conditions	Symbol	Max	Unit
Maximum Instantaneous Forward Voltage (i _F = 78.5 Amps, T _C = 25°C)	V _F	1.18	Volts
Maximum Reverse Current (rated dc voltage) T _C = 25°C T _C = 100°C	I _R	100 500	µA