

MR3500 - MR3512

AUTOMOTIVE RECTIFIER DIODES

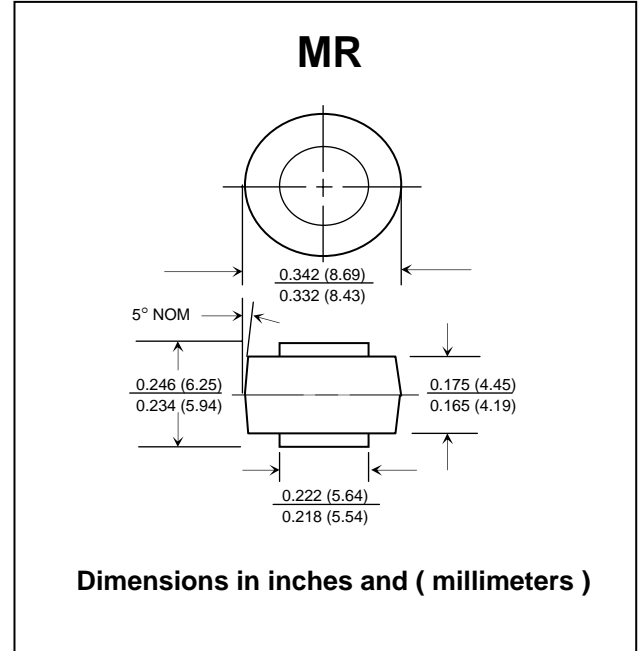
PRV : 50 - 1200 Volts
Io : 35 Amperes

FEATURES :

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

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



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	MR	MR	MR	MR	MR	MR	MR	MR	UNIT
		3500	3501	3502	3504	3506	3508	3510	3512	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	1200	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	840	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	1200	V
Maximum Average Rectified Forward Current T _c = 150°C	I _{F(AV)}	35								A
Maximum Peak Forward Surge Current Single half sine wave superimposed on rated load (JEDEC Method)	I _{FSM}	400								A
Maximum Forward Voltage at I _F = 35 A	V _F	1.1								V
Maximum DC Reverse Current Ta = 25 °C at rated DC Blocking Voltage Ta = 100 °C	I _R	5.0								μA
	I _{R(H)}	1.0								mA
Thermal Resistance (Note 1)	RθJC	1.0								°C/W
Junction Temperature Range	T _J	- 65 to + 175								°C
Storage Temperature Range	T _{STG}	- 65 to + 175								°C

Note : (1) Thermal resistance from junction to case. Single side cooled.

RATING AND CHARACTERISTIC CURVES (MR3500 - MR3512)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

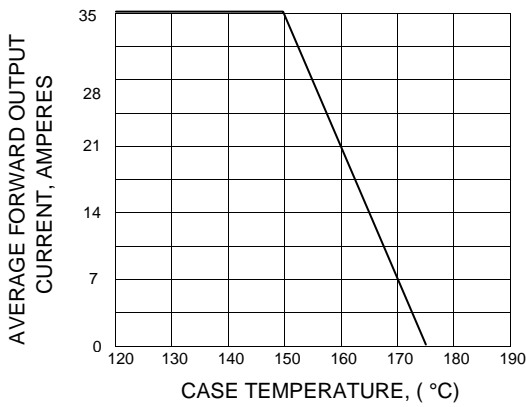


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

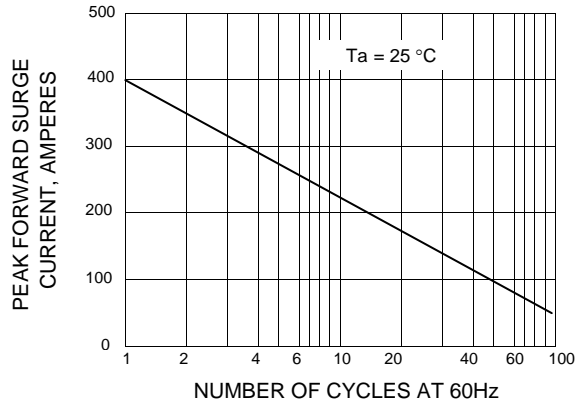


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

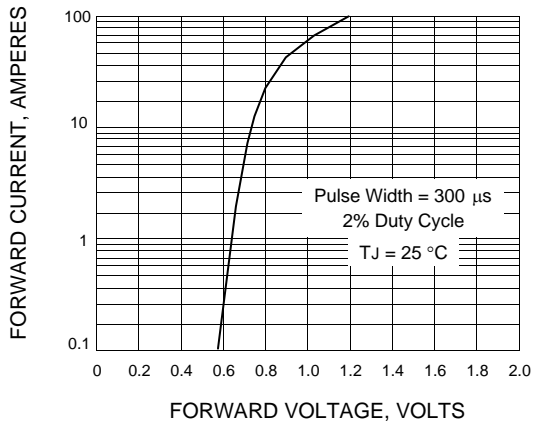


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

