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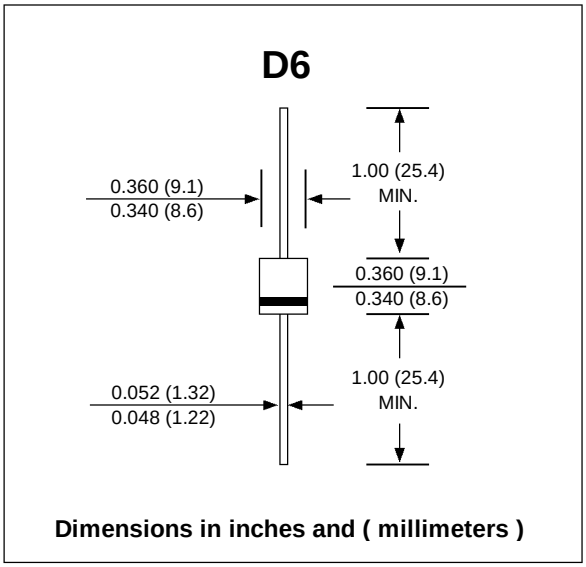
MR750 - MR760

AUTOMOTIVE RECTIFIER DIODES

PRV : 50 - 1000 Volts
Io : 22 Amperes



Dimensions in inches and (millimeters)

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
* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 2.049 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 750	MR 751	MR 752	MR 754	MR 756	MR 758	MR 760	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Non-Repetitive Peak Reverse Voltage (Halfwave, single phase , 60Hz peak)	V_{RSM}	60	120	240	480	720	960	1200	V
Maximum RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Maximum Average Rectified Forward Current (Halfwave, single phase , 60Hz peak)	$I_{F(AV)}$	22 (T_L = 60 °C , 1/8" Lead Lengths) 6 (Ta = 60 °C , P.C. Board mounting)							A
Maximum Non-Repetitive Peak Forward Surge Current (surge applied at rated load conditions)	I_{FSM}	400 (for 1 cycle)							A
Maximum Instantaneous Forward Voltage Drop (i_F = 100 A, T_J = 25°C)	v_F	1.25							V
Maximum Forward Voltage Drop (I_F = 6.0 A, Ta = 25°C , 3/8" leads)	V_F	0.9							V
Maximum Reverse Current T_J = 25 °C	I_R	25							µA
(at rated dc Voltage) T_J = 100 °C		1.0							mA
Junction Temperature Range	T_J	- 65 to + 175							°C
Storage Temperature Range	T_{STG}	- 65 to + 175							°C

RATING AND CHARACTERISTIC CURVES (MR750 - MR760)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

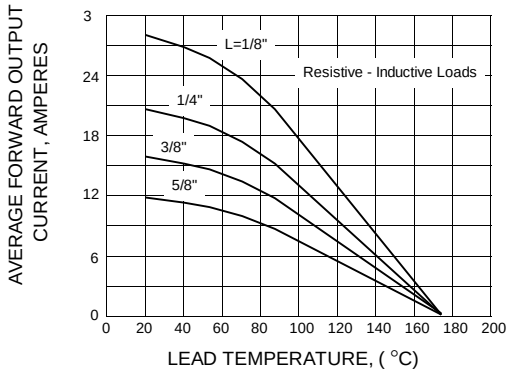


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

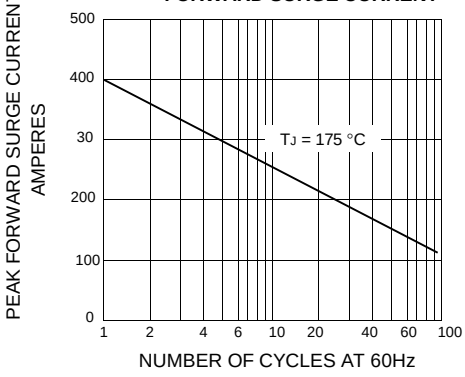


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

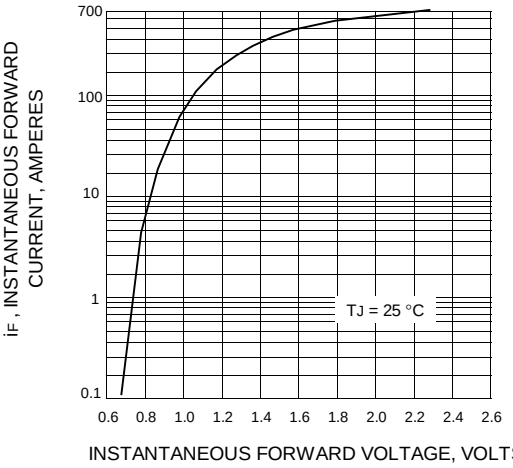
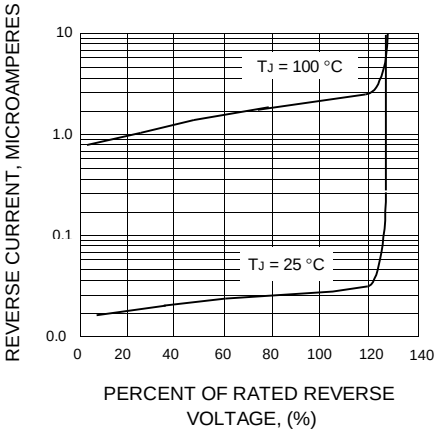



FIG.4 - TYPICAL REVERSE CHARACTERISTICS