

MR750 - MR7510 AXIAL LEADED SILICON RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V

CURRENT: 6.0 A

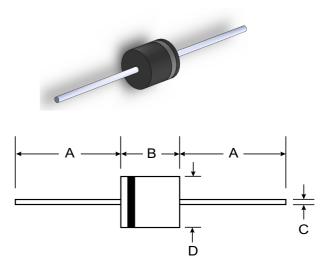
Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

Mechanical Data

- Case:R-6, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 2.1 grams (approx.)
- Mounting Position: Any
- Marking: Type Number





	R-6							
Dim	Min Max							
Α	25.4	_						
В	8.6	9.1						
С	1.2	1.3						
All D	All Dimensions in mm							

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

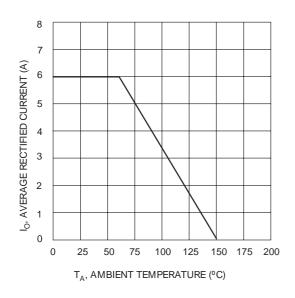
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MR750	MR751	MR752	MR754	MR756	MR758	MR7510	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) $@T_A = 60^{\circ}C$	lo	6.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	400						A	
Forward Voltage $@I_F = 6.0A$	Vfm	1.0							V
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	IRM	5.0 1.0						μA mA	
Typical Junction Capacitance (Note 2)	Cj	150						pF	
Typical Thermal Resistance Junction to Ambient (Note 1)	RθJA				20				°C/W
Operating Temperature Range	Tj	-50 to +150						°C	
Storage Temperature Range	Tstg	-50 to +150						°C	

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.





I_F, INSTANTANEOUS FORWARD CURRENT (A) 1.0 T_j = 25°C Pulse Width = 300 μs 2% Duty Cycle 0.1 0.2 1.0 0.6 1.4 1.8 0 V_F, INSTANTANEOUS FORWARD VOLTAGE (V)

100

10

Fig. 1 Forward Current Derating Curve

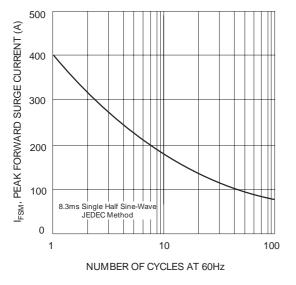


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

Fig. 2, Typical Forward Characteristics

