



SOLID STATE INC.

46 FARRAND STREET
BLOOMFIELD, NEW JERSEY 07003

www.solidstateinc.com

MR500 MR501 MR502 MR504 MR506 MR508 MR510

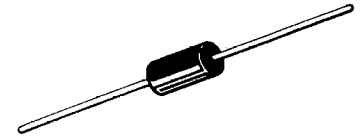
MINIATURE SIZE, AXIAL LEAD MOUNTED STANDARD RECOVERY POWER RECTIFIERS

... designed for use in power supplies and other applications having need of a device with the following features:

- High Current to Small Size
- High Surge Current Capability
- Low Forward Voltage Drop
- Economical Plastic Package

STANDARD RECOVERY POWER RECTIFIERS

50-1000 VOLTS
3 AMPERE



MAXIMUM RATINGS

Rating	Symbol	MR500	MR501	MR502	MR504	MR506	MR508	MR510	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	Volts
Non-Repetitive Peak Reverse Voltage	V_{RSM}	75	150	250	450	650	850	1050	Volts
Average Rectified Forward Current	I_O	←----- 3.0 -----→							Amp
Non-Repetitive Peak Surge Current (surge applied at rated load conditions)	I_{FSM}	←----- 100 -----→ (one cycle)							Amp
Operating and Storage Junction Temperature Range	T_J, T_{stg}	←----- -65 to +175 -----→							°C

THERMAL CHARACTERISTICS

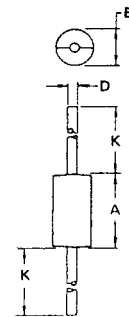
Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	28	°C/W

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min	Typ	Max	Unit
Instantaneous Forward Voltage (3) ($i_F = 9.4$ Amp, $T_J = 175^\circ\text{C}$) ($i_F = 9.4$ Amp, $T_J = 25^\circ\text{C}$)	v_F	—	0.9 1.04	1.0 1.1	Volts
Reverse Current (rated dc voltage) (3) $T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$	I_R	—	0.1 2.8	5.0 25	μA

(3) Pulse Test: Pulse Width = 300 μs , Duty Cycle = 2.0%.

OUTLINE DIMENSIONS



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	9.40	9.65	0.370	0.380
B	4.83	5.33	0.190	0.210
D	1.22	1.32	0.048	0.052
K	26.97	27.23	1.062	1.072