SOLID STATE INC.
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MR500 MR501 MR502 MR504 MR506 MR508 MR510

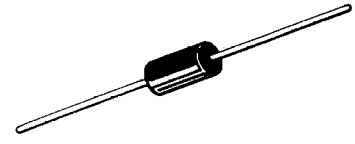
MINIATURE SIZE, AXIAL LEAD MOUNTED STANDARD RECOVERY POWER RECTIFIERS

. . . 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

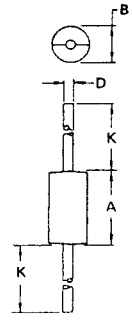
Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	28	°C/W

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min	Typ	Max	Unit
Instantaneous Forward Voltage (3) (i_F = 9.4 Amp, T_J = 175°C) (i_F = 9.4 Amp, T_J = 25°C)	v_F	– –	0.9 1.04	1.0 1.1	Volts
Reverse Current (rated dc voltage) (3) T_J = 25°C T_J = 100°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 MIN	MILLIMETERS MAX	INCHES MIN	INCHES 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