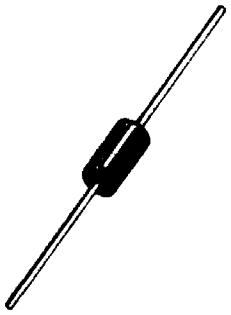
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MR500 MR501 MR502 MR504 MR506 MR508 MR510



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 (Single phase resistive load, T_Z = 95°C, PC Board Mounting) (1) (EIA Standard Conditions L = 1/32", T_L = 85°C)	I_O	3.0 8.0							Amp
Non-Repetitive Peak Surge Current (surge applied at rated load conditions)	I_{FSM}	100 (one cycle)							Amp
Operating and Storage Junction Temperature Range (2)	T_J, T_{stg}	-65 to +175							°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient (Recommended Printed Circuit Board Mounting, See Note 2).	$R_{\theta JA}$	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

(1) Derate for reverse power dissipation.
(2) Derate as shown in Figure 1.
(3) Pulse Test: Pulse Width = 300 μs, Duty Cycle = 2.0%.

Quality Semi-Conductors

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