

MR2400F
 thru
MR2406F

FAST RECOVERY
POWER RECTIFIERS
 50-600 VOLTS
 24 AMPERES

MAXIMUM RATINGS

Rating	Symbol	MR2400F	MR2401F	MR2402F	MR2404F	MR2406F	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	Volts
Nonrepetitive Peak Reverse Voltage	VRSM	75	150	250	450	650	Volts
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	Volts
Average Rectified Forward Current (Single phase, resistive load, T _C = 125°C)	I _O	←----- 24 -----→					Amp
Nonrepetitive Peak Surge Current (surge applied @ rated load conditions)	IFSM	←----- 300 (for 1 cycle) -----→					Amp
Operating Junction Temperature Range	T _J	←----- -65 to +150 -----→					°C
Storage Temperature Range	T _{stg}	←----- -65 to +175 -----→					°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case	R _{θJC}	0.8	°C/W
Thermal Resistance, Junction to Air, PC Board Mount; Perpendicular to Surface	R _{θJA}	55	°C/W

ELECTRICAL CHARACTERISTICS

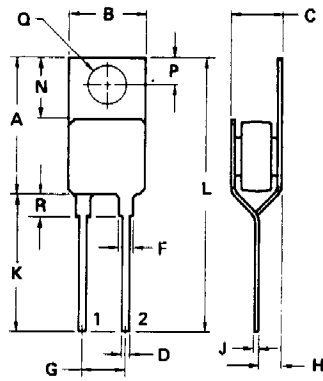
Characteristic	Symbol	Min	Typ	Max	Unit
Instantaneous Forward Voltage (I _F = 75 Amp, T _J = 150°C)	V _F	—	1.15	1.29	Volts
Forward Voltage (I _F = 24 Amp, T _C = 25°C)	V _F	—	1.00	1.15	Volts
Reverse Current (rated dc voltage) T _C = 25°C	I _R	—	10	25	μA
T _C = 100°C		—	0.5	1.0	mA
T _C = 150°C		—	7.0	10	mA

REVERSE RECOVERY CHARACTERISTICS

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Recover Time — Soft Recovery (I _F = 1.0 Amp to V _R = 30 Vdc, Figure 19) (I _{FM} = 35 Amp, di/dt = 25 A/μs, Figure 20)	t _{rr}	—	150 200	200 300	ns
Reverse Recovery Current (I _F = 1.0 Amp to V _R = 30 Vdc, Figure 19)	I _{RM(REC)}	—	—	4.0	Amp



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DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	14.22	15.88	0.560	0.625
B	9.65	10.67	0.380	0.420
C	7.21	7.87	0.284	0.310
D	0.64	1.14	0.025	0.045
F	1.52	2.29	0.060	0.090
G	4.32	5.33	0.170	0.210
H	2.03	2.92	0.080	0.115
J	0.58	0.74	0.023	0.029
K	-	14.27	-	0.562
L	-	30.15	-	1.187
N	5.84	6.86	0.230	0.270
P	2.54	3.05	0.100	0.120
Q	3.53	3.73	0.139	0.147
R	-	5.08	-	0.200