20 STERN AVE. SPRINGFIELD, NEW JERSEY 07081 U.S.A. TELEPHONE: (973) 376-2922

(212) 227-6005

FAX: (973) 376-8960

MR2502, MR2504, MR2510

MR2504 and MR2510 are Preferred Devices

Medium-Current Silicon Rectifiers

... compact, highly efficient silicon rectifiers for medium-current applications requiring:

- High Current Surge 400 Amperes @ T_J = 175°C
- Peak Performance @ Elevated Temperature 25 Amperes @ $T_C = 150^{\circ}C$
- Low Cost
- Compact, Molded Package For Optimum Efficiency in a Small Case Configuration

Mechanical Characteristics:

- Case: Epoxy, Molded
- Weight: 1.8 grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminals are Readily Solderable
- Lead Temperature for Soldering Purposes: requires a custom temperature soldering profile
- Polarity: Cathode Polarity Band

MEDIUM-CURRENT SILICON RECTIFIERS 25 AMPERES 200-1000 VOLTS DIFFUSED JUNCTION



MICRODE BUTTON CASE 193

MARKING DIAGRAM



MR25xx = Device Code
xx = 02, 04 or 10
L = Location Code
YY = Year

WW = Work Week

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

MR2502, MR2504, MR2510

MAXIMUM RATINGS

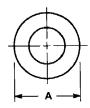
Characteristic	Symbol	MR2502	MR2504	MR2510	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	200	400	1000	Volts
Non-Repetitive Peak Reverse Voltage (Halfwave, single phase, 60 Hz peak)	V _{RSM}	240	480	1200	Volts
Average Rectified Forward Current (Single phase, resistive load, 60 Hz, T _C = 150°C)	Io	25		Amps	
Non-Repetitive Peak Surge Current (Surge applied at rated load conditions, halfwave, single phase, 60 Hz)	I _{FSM}	400 (for 1 cycle)		Amps	
Operating and Storage Junction Temperature Range	T _J , T _{stg}	- 65 to +175		°C	

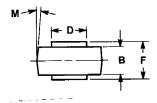
THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case (Single Side Cooled)	R _{θJC}	1.0	°C/W

ELECTRICAL CHARACTERISTICS

Characteristics and Conditions	Symbol	Max	Unit
Maximum Instantaneous Forward Voltage $(i_F = 78.5 \text{ Amps}, T_C = 25^{\circ}\text{C})$	VF	1.18	Volts
Maximum Reverse Current (rated dc voltage) $T_{C} = 25^{\circ}C$ $T_{C} = 100^{\circ}C$	I _R	100 500	μΑ





	MILLIMETERS		INCHES		
DIM	MIN	MAX	MIN	MAX	
Α	8.43	8.69	0.332	0.342	
В	4.19	4.45	0.165	0.175	
D	5.54	5.64	0.218	0.222	
F	5.94	6.25	0.234	0.246	
- u	5 ° NOM		5°NOM		