



DIOTEC ELECTRONICS CORP  
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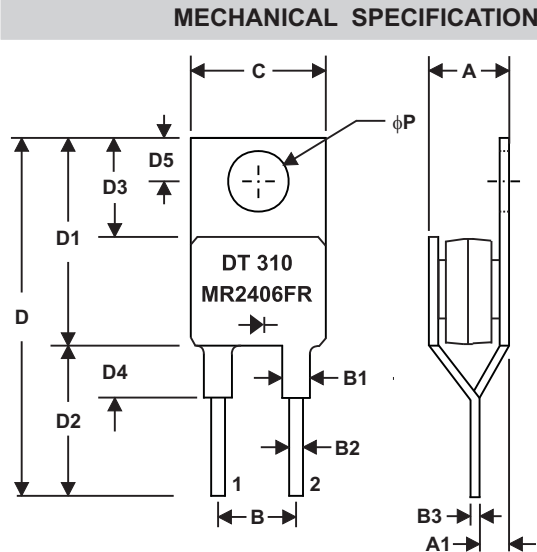
## 25 AMP SOFT RECOVERY FAST SWITCHING TAB MOUNTED DIODES

### FEATURES

- VOID FREE Vacuum Die Soldering For Maximum Mechanical Strength And Heat Dissipation (Solder Voids: Typical < 2%, Max. < 10% of Die Area)
- True Soft Recovery Characteristic With No Ringing, Spikes, or Overshoot
- HIGH Frequency: 250 kHz  
FAST Recovery: 100nS - 150nS
- Unmatched Performance - Minimal RFI/EMI, Reduced Power Losses, Extremely Cool Operation Increased Power Supply Efficiency

### MECHANICAL DATA

- Structure: Epoxy encapsulated diode body with metal tabs
- Finish: All external surfaces are corrosion resistant and readily solderable
- Maximum Soldering Temperature: 250 °C 3/8" from case for 10 seconds
- Mounting: Lead or chassis mounted, same configuration as TO-220AB
- Mounting Torque: 8 in-lbs Max.
- Polarity: Cathode to Front Tab .
- Weight: 1.2 Ounces (3.6 Grams), approximately



PIN 1 CATHODE  
PIN 2 ANODE

Sym	Min	Max
A	0.284	0.310
A1	0.080	0.115
B	0.170	0.210
B1	0.060	0.090
B2	0.025	0.045
B3	0.023	0.029
C	0.380	0.420
D		1.187
D1	0.560	0.625
D2		0.562
D3	0.230	0.270
D4		0.200
D5	0.100	0.120
phi P	0.139	0.147

ALL DIMENSIONS IN INCHES

**RoHS COMPLIANT**

### MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive loads, derate current by 20%.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS					UNITS
		MR 2400FR	MR 2401FR	MR 2402FR	MR 2404FR	MR 2406FR	
Series Number							
Maximum DC Blocking Voltage	V <sub>RM</sub>	50	100	200	400	600	VOLTS
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	
Maximum Peak Recurrent Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	
Average Forward Rectified Current	I <sub>O</sub>	25					AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	I <sub>FSM</sub>	400					
Maximum Forward Voltage at 25 Amps DC	V <sub>FM</sub>	1.2 (Typical 1.1)					VOLTS
Maximum Average DC Reverse Current At Rated DC Blocking Voltage	I <sub>RM</sub>	1.0 50					μA
Typical Thermal Resistance, Junction to Case	R <sub>θJC</sub>	0.8					°C/W
Maximum Reverse Recovery Time - Soft Recovery	T <sub>RR</sub>	150 (Typ. 100)					nSec
Junction Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150					°C