

**DIOTEC ELECTRONICS CORP**  
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## 25 AMP TAB MOUNTED BUTTON DIODES

### FEATURES

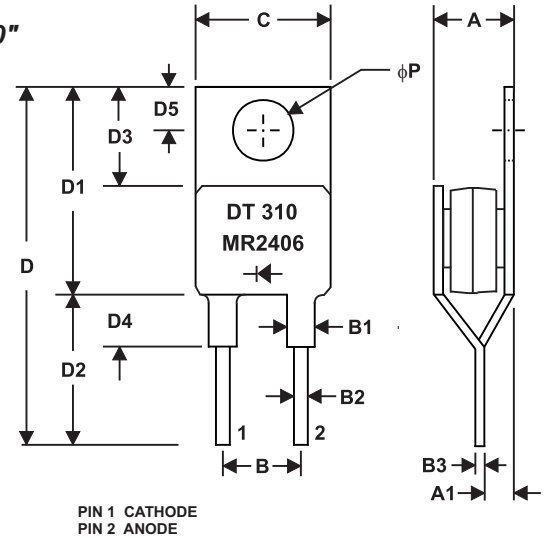
- Void Free Vacuum Die Soldering For Maximum Mechanical Strength And Heat Dissipation (Solder Voids: Typical < 2%, Max. < 10% of Die Area)
- Large Die For High Power Heavy Duty Performance
- High Heat Handling Capability With Very Low Thermal Stress
- Proprietary Junction Passivation For Superior Reliability And Performance
- Low Forward Voltage Drop

### 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 Tab With Hole; Reverse polarity available by adding the suffix "R" to the P/N (e.g., MR2400R)
- Weight: 1.2 Ounces (3.6 Grams), approximately

### MECHANICAL SPECIFICATION

*Die Size:  
0.160" x 0.160"  
Square*



PIN 1 CATHODE  
PIN 2 ANODE

**RoHS COMPLIANT**

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

### MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS					UNITS
		MR 2400	MR 2401	MR 2402	MR 2404	MR 2406	
Series Number							
Maximum DC Blocking Voltage	VRRM						VOLTS
Maximum RMS Voltage	VRWM	50	100	200	400	600	
Maximum Peak Recurrent Reverse Voltage	VDC						
Non-repetitive Peak Reverse Voltage (Half wave, single phase, 60 Hz peak)	VRSM	60	120	240	480	720	
Average Forward Rectified Current @ Tc = 150 °C	Io	25					AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	IFSM	400					
Maximum Forward Voltage Drop at 25 Amp DC	VFM	1.05 (Typical 1.00)					VOLTS
Maximum Average DC Reverse Current @ TA = 25 °C At Rated DC Blocking Voltage @ TA = 100 °C	IRM	1 50					μA
Maximum Thermal Resistance, Junction to Case (Note 1)	RθJC	0.95					°C/W
Junction Operating and Storage Temperature Range	TJ, TSTG	-65 to +175					°C