PART NUMBERS

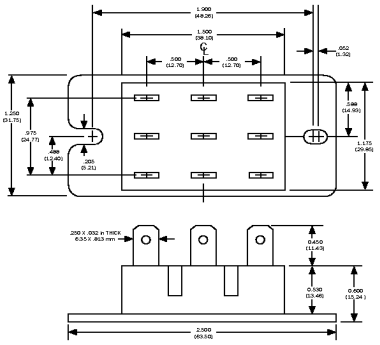
Package Style	Output Current Designator	Circuit Type	AC Line Voltage	Options	Terminal Designator
FB Series Designator	**5** 25 Amps **6** 42.5 Amps	**1** Common Cathode Full Wave Bridge **2** Common Anode Full Wave Bridge **4** SCR Full Wave Bridge **5** AC Switch	**1** 120 Vac **2** 240 Vac **3** 280 Vac **4** 480 Vac	**F** Free Wheeling Diode **-012** EZ Mount™	**-2T** Standard **-2** Isolation Barrier

Add Options Suffix to Part Number, as desired, in order shown.

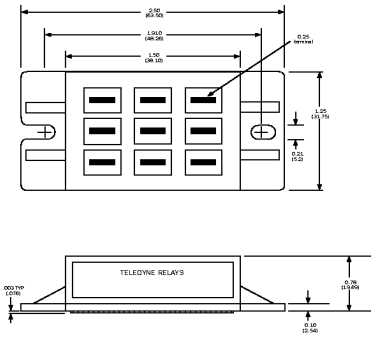
Part Number Example: FB512F-012-2T

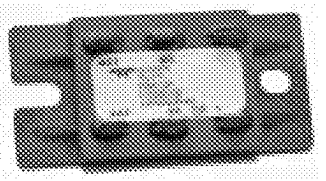
MECHANICAL SPECIFICATION

Terminal Style 2T

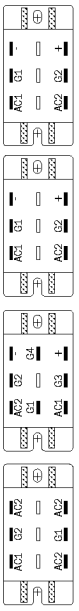


Terminal Style 2

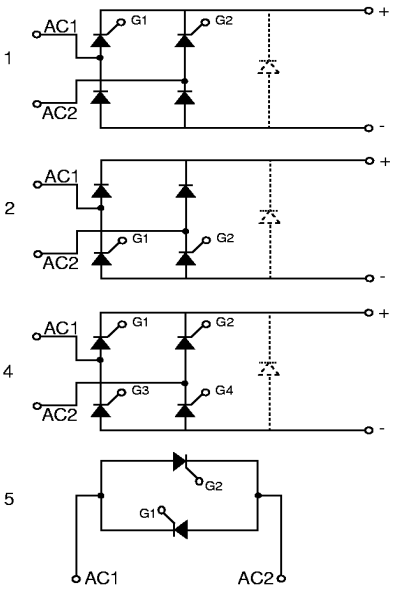




TERMINAL ASSIGNMENTS



SERIES B CIRCUITS



ELECTRICAL SPECIFICATIONS

SYMBOL	SPECIFICATION	RATINGS FB5	RATINGS FB6
I_D	Maximum DC Output Current @Tc=85°C(A)	25	42.5
V_F	Maximum Voltage Drop @Amps Peak	1.65V@25A	1.6V@42.5A
T_J	Operating Junction Temperature Range	-40°C to +125°C	
di/dt	Critical Rate of Rise of On-State Current @Tj=125°C(A/µs)	100	
dv/dt	Critical Rate of Rise of Off-State Voltage @Tj=125°C(V/µs)	500	
V_{RMS}	AC Line Input Voltage	—120 ($400V_{RRM}$)—	
	(Repetitive Peak Reverse Voltage)	—240 ($600V_{RRM}$)—	
		—280 ($800V_{RRM}$)—	
		—480 ($1200V_{RRM}$)—	
I_{TSM}	Maximum Non-Repetitive Surge Current (A) [1/2 Cycle, 60Hz]	300	600
I^2T	Maximum I^2T for Fusing (A^2sec) [t=8.3ms]	370	1500
I_{GT}	Maximum Required Gate Current to Trigger @25°C (mA)	60	80
V_{GT}	Maximum Required Gate Voltage to Trigger @25°C (V)	2.5	3.0
$P_{G(AV)}$	Average Gate Power	0.5W	
V_{GM}	Maximum Peak Gate Voltage (Reverse)	5.0V	
R_{ejc}	Maximum Thermal Resistance Junction to Ceramic Base per Chip	0.9°C/W	0.7°C/W
V_{ISOL}	Isolation Voltage	2500 V_{RMS}	

FEATURES/BENEFITS

- Circuit Modules provide ratings up to 42.5 amps.
- Thermal managed construction yields superior thermal impedance and power cycling capabilities.
- Available in four circuits.
- Exposed ceramic baseplate for reduced thermal resistance and best thermal performance.
- All models have 2500 Vrms isolation.
- UL Certified: File #E66830.

TYPICAL APPLICATIONS

- On/Off control of high power AC equipment.
- Motor control.
- Can be used singly or as a power control building blocks.