


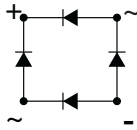




Glass Passivated Single-Phase Bridge Rectifier

Power - Power M - Power L		Voltage 50 V to 1000 V	Current 15-25-35-40-50 A
 <p>Power</p>  <p>Power M</p>  <p>Power L</p> 		FEATURES <ul style="list-style-type: none"> • High case dielectric strength • High forward surge current capability • UL recognition file number E320541, Vol. 2. • Universal 3-way terminals: snap-on, wire wrap-around, or PCB mounting • Low thermal resistance • Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC • Solder dip 260°C, 40s • Typical I_R less than 0.3μA <div>   RoHS COMPLIANT </div>	
		MECHANICAL DATA <ul style="list-style-type: none"> • Case: Power, Power L, Power M. Epoxy meets UL 94V-0 flammability rating. • Polarity: As marked, positive lead by beveled corner. • Mounting Torque: 20 inches-lbs. max. • Terminals: Nickel plated on faston lugs or silver plated on wire leads, solderable per J-STD-002 and JESD22-B102. Suffix letter "L" added to indicate wire leads (e.g. FB1501L). Suffix letter Faston "M" (e.g. FB1501M). 	
		TYPICAL APPLICATIONS Used in ac-to-dc bridge full wave rectification for SMPS, lighting ballaster, adapter, battery charger, home appliances, office equipment, and telecommunication applications..	

Maximun Ratings and Electrical Characteristics at 25°C

SYMBOL	PARAMETER	FB15-15L-15M, FB25-25L-25M, FB35-35L-35M, FB40-40M, FB50-50M							
		00	01	02	04	06	08	10	
V_{RRM}	Peak Recurrent Reverse Voltage (V)	50	100	200	400	600	800	1000	
V_{RMS}	Maximum RMS Voltage (V)	35	70	140	280	420	560	700	
V_R	Recommended Input Voltage (V)	20	40	80	125	250	380	500	
I_F (AV)	Max. Forward Current R-load: At T case = 55 °C	FB15	15 A						
		FB25	25 A						
		FB35	35 A						
		FB40	40 A						
		FB50	50 A						
	At T case = 90 °C	FB15	10 A						
		FB25	17 A						
		FB35	20 A						
		FB40	25 A						
		FB50	35 A						
	With Al Square Chassis (200 cm ² x 3 mm.) Tamb = 45 °C	FB15	8 A						
		FB25	10 A						
		FB35	12 A						
		FB40	14 A						
		FB50	16 A						

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Maximun Ratings and Electrical Characteristics at 25°C

SYMBOL	PARAMETER		FB15-15L-15M, FB25-25L-25M, FB35-35L-35M, FB40-40M, FB50-50M						
			00	01	02	04	06	08	10
I _{FRM}	Recurrent peak forward current	FB15	60 A						
		FB25	75 A						
		FB35	75 A						
		FB40	100 A						
		FB50	100 A						
I _{FSM}	10 ms. peak forward surge current	FB15	300 A						
		FB25	300 A						
		FB35	400 A						
		FB40	400 A						
		FB50	400 A						
I ² t	I ² t value for fusing (t = 10 ms)	FB15	450 A ² sec						
		FB25	450 A ² sec						
		FB35	800 A ² sec						
		FB40	800 A ² sec						
		FB50	800 A ² sec						
T _j	Operating Temperature Range		-55 to + 150° C						
T _{stg}	Storage Temperature Range		-55 to + 150° C						

Electrical Characteristics at Tamb = 25 °C

V_F	Max. forward voltage drop per element at	$I_F = 7.5$ A	FB15	1.1 V
		$I_F = 12.5$ A	FB25	1.1 V
		$I_F = 17.5$ A	FB35	1.1 V
		$I_F = 20$ A	FB40	1.1 V
		$I_F = 25$ A	FB50	1.1 V
I_R	Max. reverse current per element at V_{RRM}	5 μ A		
R_{thj-c}	Typical thermal resistance junction to case (Note 1)	1.5°C/W		
	Isolation voltage from case to leads	2500 Vac		

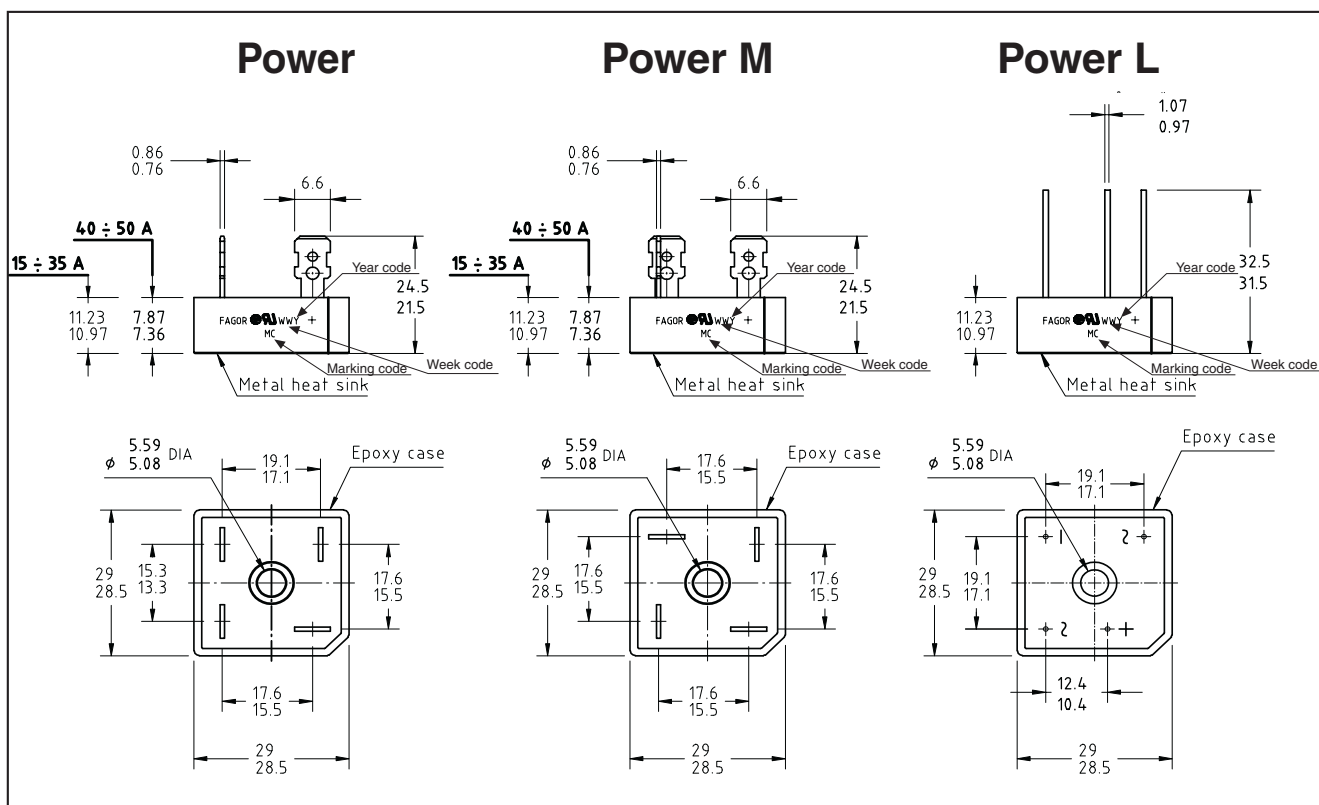
(Note 1) With heatsink

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Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
FB2502	POWER	BOX POWER	100	16.95
FB2502M	POWER	BOX POWER M	100	17.37
FB2502L	POWER	BOX POWER L	100	16.95

Package Outline Dimensions: (mm) Power - Power M - Power L



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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

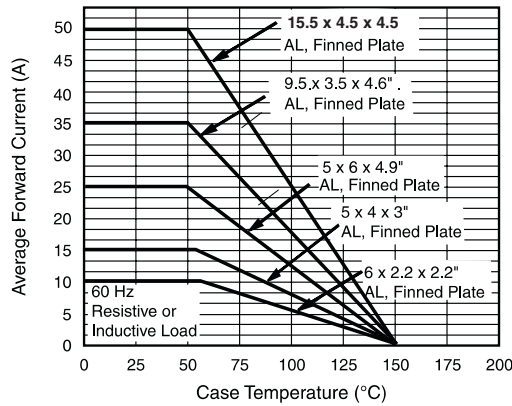


Fig. 1 - Maximum Output Rectified Current

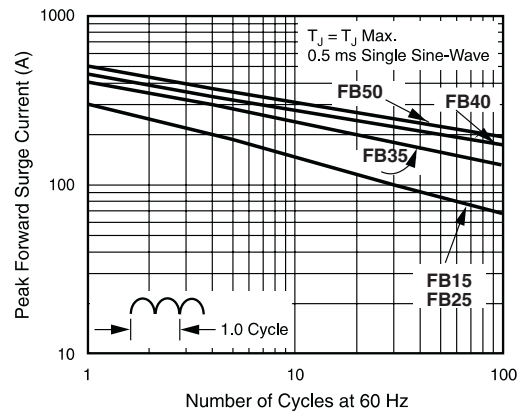


Fig. 4 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

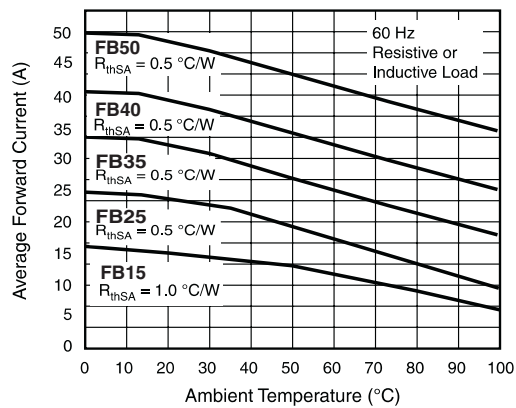


Fig. 2 - Maximum Output Rectified Current

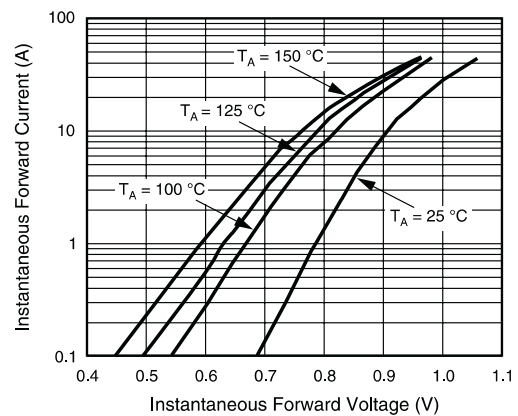


Fig. 5 - Typical Instantaneous Forward Characteristics Per Diode

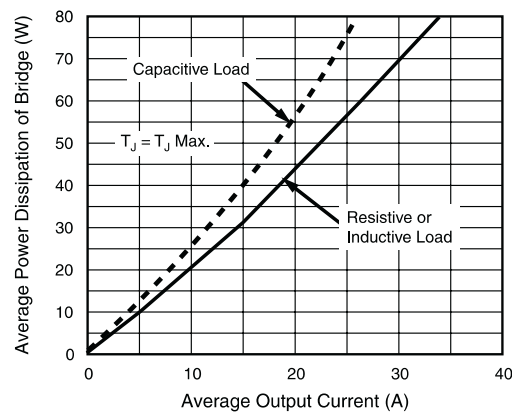


Fig. 3 - Maximum Power Dissipation

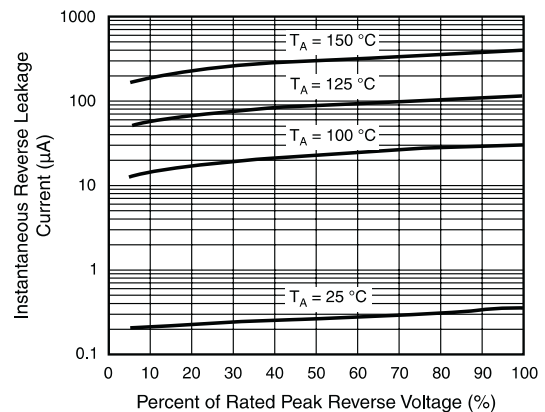


Fig. 6 - Typical Reverse Leakage Characteristics Per Diode

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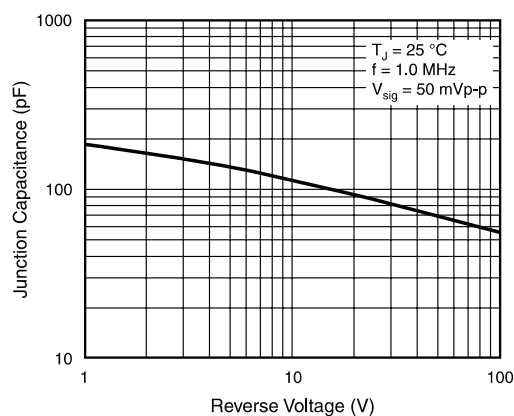


Fig. 7 - Typical Junction Capacitance Per Diode

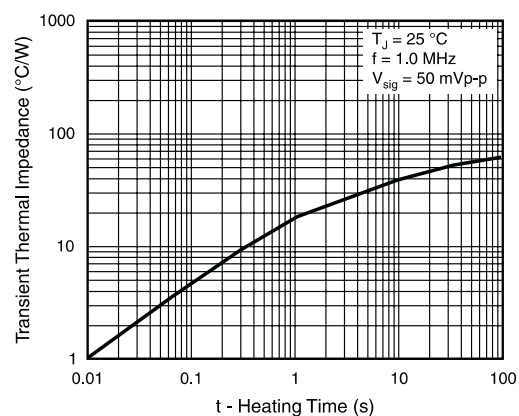


Fig. 8 - Typical Transient Thermal Impedance Per Diode

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