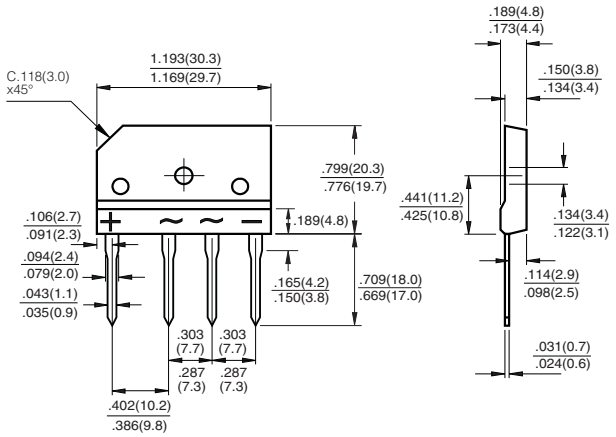
5.0 Amp. Glass Passivated Bridge Rectifier

Plastic Case



• Mounting Instructions

- High temperature soldering guaranteed: 260 ºC – 10 sc.
- Recommended mounting torque: 0.8 N.m.

Voltage	Current
200 to 600 V	5.0 A

HYPERECTIFIER®

• Glass Passivated Junction Chips.

- Lead and polarity identifications.
- Case: Molded Plastic.
- Ideal for printed circuit board (P.C.B.).
- High surge current capability.
- The plastic material carries U/L recognition 94 V-O.

Maximum Ratings, according to IEC publication No. 134

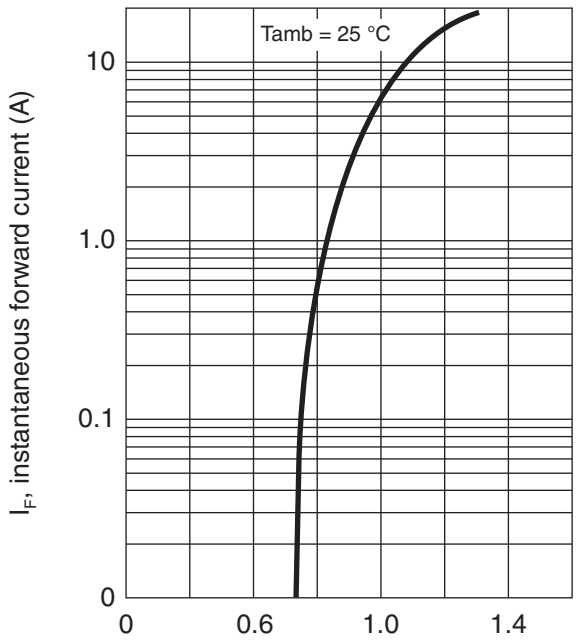
		D5.1XB 20	D5.1XB 30	D5.1XB 60
V_{RRM}	Peak recurrent reverse voltage (V)	200	300	600
V_{RMS}	Maximum RMS Voltage (V)	140	210	420
$I_{F(AV)}$	Max. Average forward current with heatsink without heatsink	5.0 A at Tc: 100 °C 3.0 A at 25 °C		
I_{FSM}	8.3 ms. Peak Forward Surge Current (Jedec Method)	180 A		
V_{DIS}	Dielectric strength (terminals to case, AC 1 min.)	2500 V		
I^2t	I^2t value for fusing (t = <8.3 ms)	120 A^2sec		
T_j	Operating temperature range	-40 to +150 °C		
T_{stg}	Storage temperature range	-40 to +150 °C		

Electrical Characteristics at Tamb = 25 °C

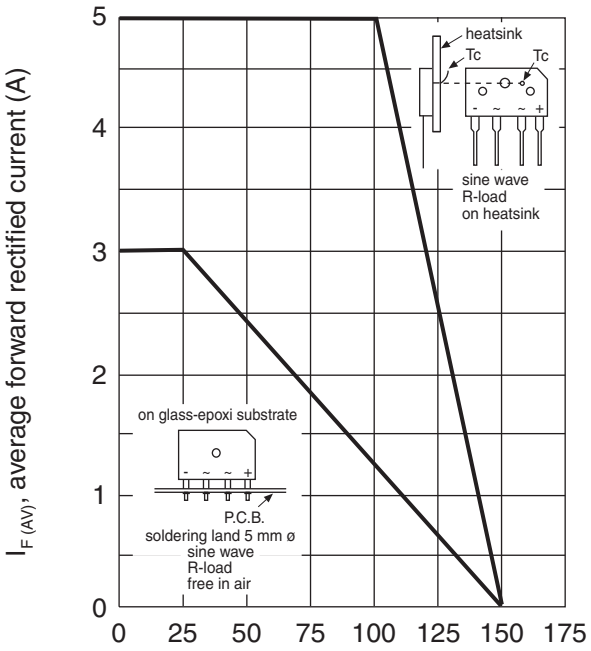
V_F	Max. forward voltage drop per diode at I_F = 4.0 A I_F = 8.0 A	1.00 V 1.10 V
I_R	Max. instantaneous reverse current at V_{RRM}	5 µA
	MAXIMUM THERMAL RESISTANCE	
$R_{th\ (j-c)}$	Junction-case. With Heatsink.	3.4 °C/W
$R_{th\ (j-a)}$	Junction-Ambient. Without Heatsink.	22 °C/W

Rating And Characteristic Curves

TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT