

Bridge Rectifier



Features:

- Electrically isolated metal case for maximum heat dissipation
- Surge overload ratings to 400A

Specifications:

No. of Phases	: Single
Repetitive Reverse Voltage V _{rrm} Max	: 1kV
Forward Current I _f (AV)	: 15A
Diode Mounting Type	: Quick Connect
No. of Pins	: 4
Body Height Max	: 11.5mm
Diode Type	: Bridge Rectifier, Single Phase
External Depth	: 28.7mm
External Length / Height	: 25.4mm
Fixing Hole Diameter	: 4.9mm
Input Voltage	: 800V
Terminal Type	: 6.35mm × 0.8mm
Termination Type	: Screw

Mechanical Data:

Case	: Metal, electrically isolated
Terminals	: Plated 0.25 inches Faston or wire lead ≤40 mils
Weight	: 1 ounce, 30 grams
Mounting position	: Any

Bridge Rectifier



Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified

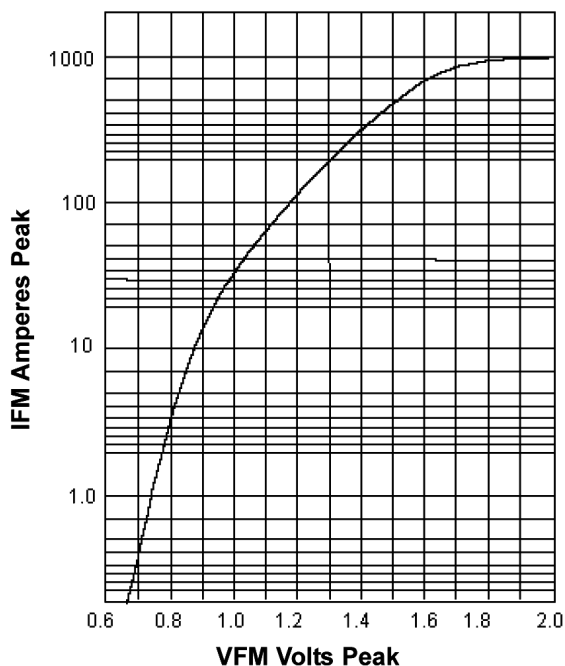
Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load, derate current by 20%

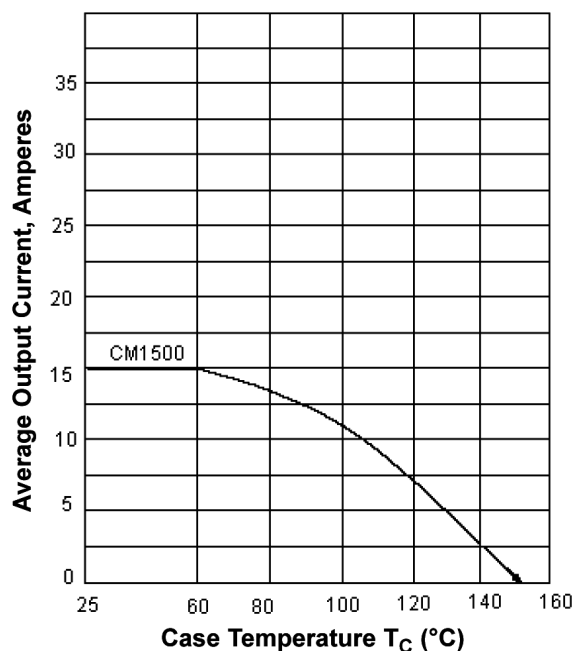
Characteristic	-010	Units
Max. recurrent peak reverse voltage	1,000	V
Max. RMS input voltage	800	V
Max. DC blocking voltage	1,000	V
Max. average forward current* for resistive load at $T_C = 55^\circ\text{C}$	15	A
Non-repetitive peak forward surge current at rated load	300	A
Max. forward voltage per bridge element at specified current ($I_F = 7.5\text{A}$)	1.2	V
Max. reverse leakage current at rated DC blocking voltage	10	μA
I ² t rating for fusing (t < 8.3ms)	374	A ² s
Typical thermal resistance $R_{\theta JC}$	2.5	$^\circ\text{C/W}$
Operating temperature range T_J Storage temperature range T_{STG}	-55 to +150	$^\circ\text{C}$

Rating and Characteristics Curves:

Typical Instantaneous Forward
Characteristics at $T_J = 25^\circ\text{C}$



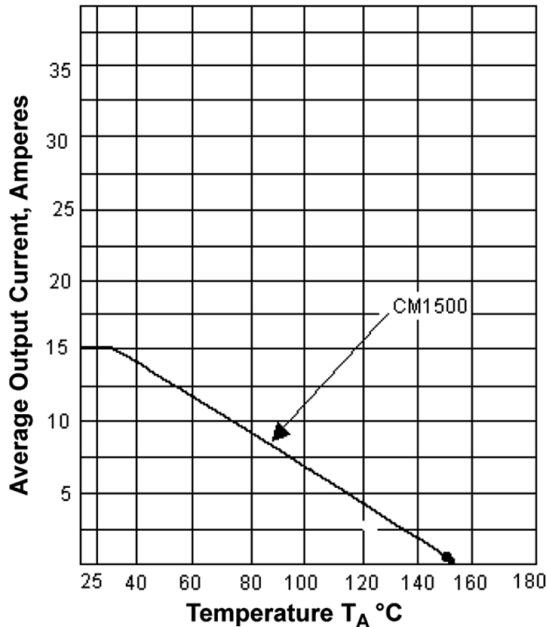
Output Current VS. Case Temperature
Resistive or Inductive Load $T_J = 150^\circ\text{C}$



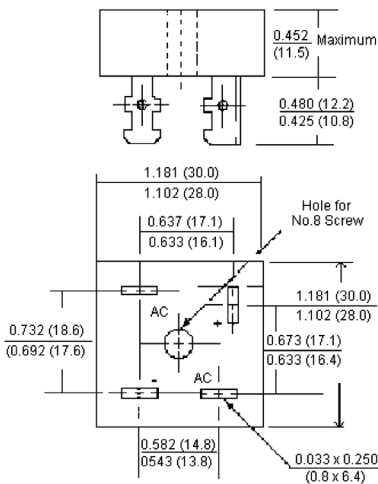
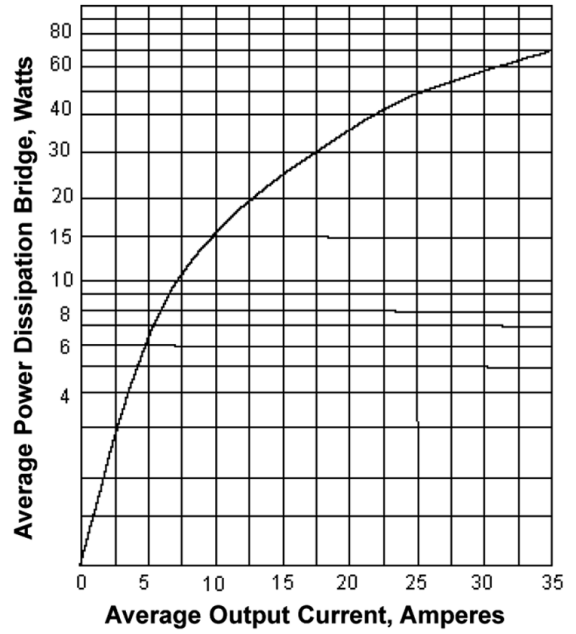
Bridge Rectifier



Output Current VS. Ambient Temperature
Resistive or Inductive Load Bridge
Mounted on a 8 Inches x 8 Inches
Aluminium Plate 25 Inches Thick



Power Dissipation VS. Average Output Current
Resistive or Inductive load,
 $T_J = 150^\circ\text{C}$



Dimensions : Millimetres

Part Number Table

Description	Part Number
Bridge Rectifier, 15A, 1,000V	CM15010

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2012.

