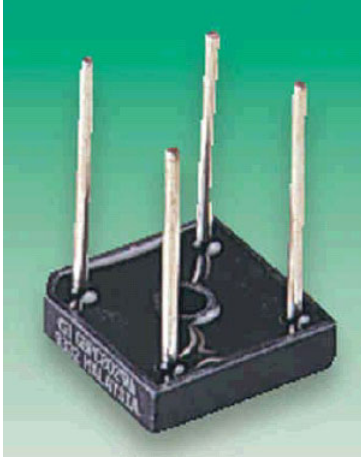


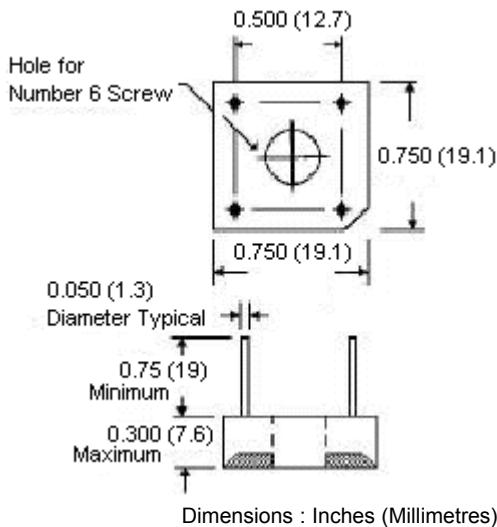
CP 10A Series

Single Phase Bridge Rectifiers



Features:

- High surge current capability.
- PCB mounted/screw fixing.
- Surge overload rating-200 Amperes peak.
- Low forward voltage drop and reverse leakage.
- Small size, simple installation.
- Reliable low cost construction utilizing moulded plastic technique.



Mechanical Data:

- Case : Moulded plastic with heatsink integrally mounted in the bridge encapsulation.
- Terminals : Lead solderable per MIL-STD-202 Method 208.

CP 10A Series

Single Phase Bridge Rectifiers



Maximum Ratings and Electrical Characteristics:

Ratings at 25°C ambient temperature unless otherwise noted; resistive or inductive load at 60Hz.

	CP1000	CP1001	CP1004	CP1006	CP1008	Units
Maximum recurrent peak reverse voltage	50	100	400	600	800	V
Maximum bridge input voltage RMS	35	70	280	420	560	
Maximum average rectified output at $T_A = 50^\circ\text{C}^*$ See Figure 2	10.0					A
Peak one cycle surge overload current	200					
Maximum forward voltage drop per element at 5.0A dc and 25°C. See Figure 3	1.1					V
Maximum reverse leakage at rated DC blocking voltage per element at 25°C See Figure 4 at 100°C	10.0 1.0					μA mA
Typical junction capacitance per leg (NOTE 4) CJ	200					pF
I^2t Rating for fusing ($t < 8.3\text{ms}$)	164					A ² S
Typical thermal resistance (NOTE 2) R θ JA Typical thermal resistance (NOTE 3) R θ JC	25 5					$^\circ\text{C}/\text{W}$
Operating temperature range	-55 to +125					$^\circ\text{C}$
Storage temperature range	-55 to +150					

Notes:

* Unit mounted on PC board.

1. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with number 6 screw.
2. Unit mounted in free air, no heatsink, PCB at 0.375" (9.5mm) lead length with 0.5 x 0.5" (12 x 12mm) copper pads.
3. Unit mounted on a 3.0" x 3.0" x 0.11" thick (7.5 x 7.5 x 0.3cm) Aluminium plate heatsink.
4. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

CP 10A Series

Single Phase Bridge Rectifiers



Rating and Characteristic Curves

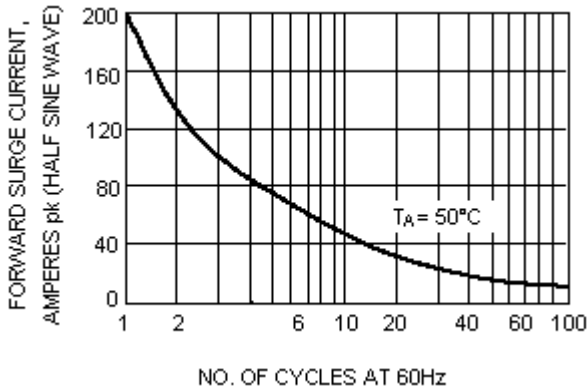


Figure 1 - Non-Recurrent Surge Rating

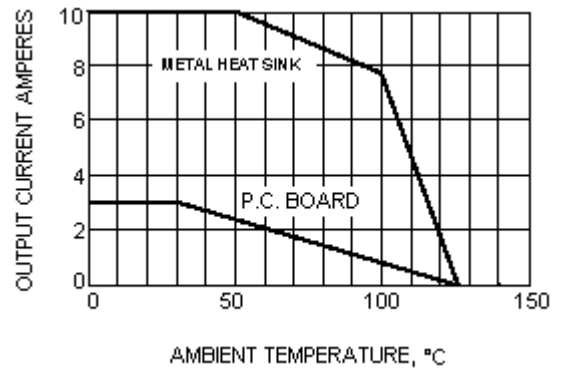


Figure 2 - Derating Curve for Output Rectified Current

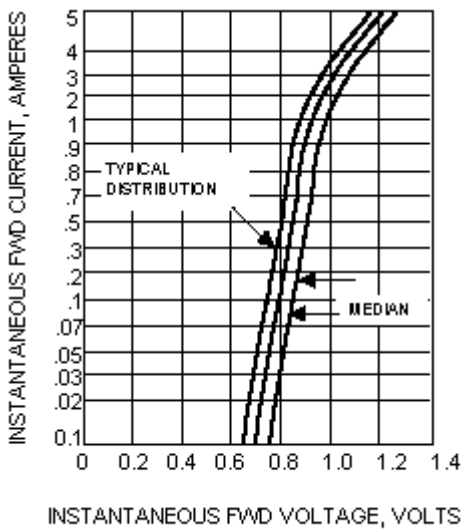


Figure 3 - Typical Forward Characteristics (25°C)

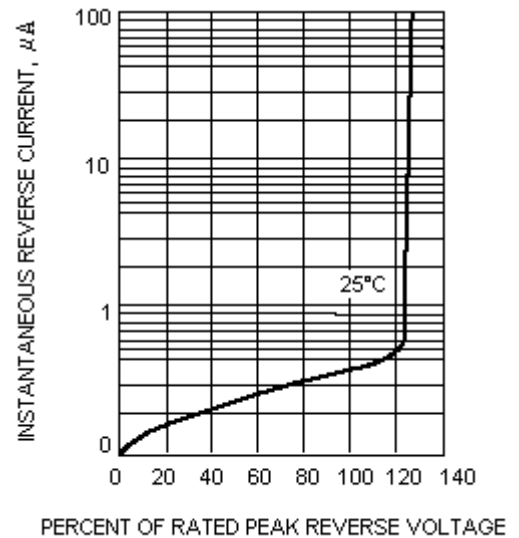


Figure 4 - Reverse Characteristics

CP 10A Series

Single Phase Bridge Rectifiers



Specifications

I_o (A) at $T_A = 50^\circ\text{C}$	I_{FSM} (A)	Body		Lead			Current Rating (A)	Part Number
		Height	Width/Depth	Length	Spacing	Diameter (Typical)		
10	200	7.6	19.1	19.0	12.7	1.3	10	CP1000
								CP1001
								CP1004
								CP1006
								CP1008

Dimensions : Millimetres

CP 10A Series

Single Phase Bridge Rectifiers



Notes:

International Sales Offices:



AUSTRALIA – Farnell InOne
Tel No: ++ 61 2 9645 8888
Fax No: ++ 61 2 9644 7898



FINLAND – Farnell InOne
Tel No: ++ 358 9 560 7780
Fax No: ++ 358 9 345 5411



NETHERLANDS – Farnell InOne
Tel No: ++ 31 30 241 7373
Fax No: ++ 31 30 241 7333



SWITZERLAND – Farnell InOne
Tel No: ++ 41 1 204 64 64
Fax No: ++ 41 1 204 64 54



AUSTRIA – Farnell InOne
Tel No: ++ 43 662 2180 680
Fax No: ++ 43 662 2180 670



FRANCE – Farnell InOne
Tel No: ++ 33 474 68 99 99
Fax No: ++ 33 474 68 99 90



NEW ZEALAND – Farnell InOne
Tel No: ++ 64 9 357 0646
Fax No: ++ 64 9 357 0656



UK – Farnell InOne
Tel No: ++ 44 8701 200 200
Fax No: ++ 44 8701 200 201



BELGIUM – Farnell InOne
Tel No: ++ 32 3 475 2810
Fax No: ++ 32 3 227 3648



GERMANY – Farnell InOne
Tel No: ++ 49 89 61 39 39 39
Fax No: ++ 49 89 613 59 01



NORWAY – Farnell InOne
Tel No: ++ 45 44 53 66 66
Fax No: ++ 45 44 53 66 02



UK – BuckHickman InOne
++ 44 8450 510 150
++ 44 8450 510 130



BRAZIL – Farnell-Newark InOne
Tel No: ++ 55 11 4066 9400
Fax No: ++ 55 11 4066 9410



HONG KONG – Farnell-Newark InOne
Tel No: ++ 852 2268 9888
Fax No: ++ 852 2268 9899



PORTUGAL – Farnell InOne
Tel No: ++ 34 93 475 8804
Fax No: ++ 34 93 474 5288



UK – CPC
++ 44 8701 202 530
++ 44 8701 202 531



CHINA – Farnell-Newark InOne
Tel No: ++86 10 6238 5152
Fax No: ++86 10 6238 5022



IRELAND – Farnell InOne
Tel No: ++ 353 1 830 9277
Fax No: ++ 353 1 830 9016



SINGAPORE – Farnell-Newark InOne
Tel No: ++ 65 6788 0200
Fax No: ++ 65 6788 0300



EXPORT – Farnell InOne
Tel No: ++ 44 8701 200 208
Fax No: ++ 44 8701 200 209

For enquiries from all other markets



DENMARK – Farnell InOne
Tel No: ++ 45 44 53 66 44
Fax No: ++ 45 44 53 66 06



ITALY – Farnell InOne
Tel No: ++ 39 02 93 995 200
Fax No: ++ 39 02 93 995 300



SPAIN – Farnell InOne
Tel No: ++ 34 93 475 8805
Fax No: ++ 34 93 474 5107



ESTONIA – Farnell InOne
Tel No: ++ 358 9 560 7780
Fax No: ++ 358 9 345 5411



MALAYSIA – Farnell-Newark InOne
Tel No: ++ 60 3 7873 8000
Fax No: ++ 60 3 7873 7000



SWEDEN – Farnell InOne
Tel No: ++ 46 8 730 50 00
Fax No: ++ 46 8 83 52 62

<http://www.farnellinone.com>

<http://www.buckhickmaninone.com>

<http://www.cpc.co.uk>

Disclaimer This data sheet and its contents (the "Information") belong to the Premier Farnell Group (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 2004.

