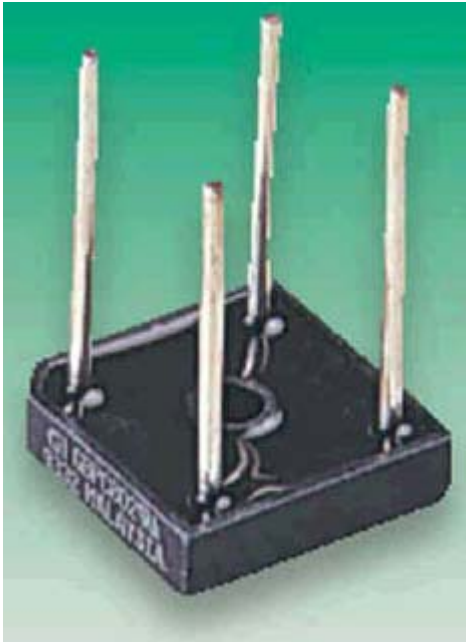


Single Phase Bridge Rectifier



CP6 Series

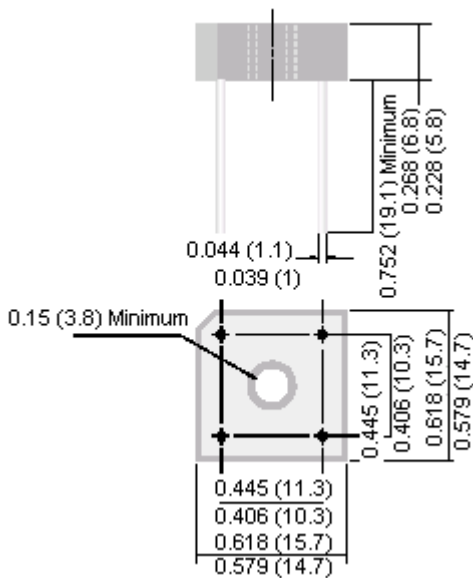


Features:

- High surge current capability
- PCB mounted / screw fixing
- Surge overload ratings to 125 Amperes
- Low forward voltage, and reverse leakage
- Small size, simple installation
- Reliable low cost construction utilizing moulded plastic technique

Mechanical Data :

Mounting Position	: Any
Weight	: 0.2 ounce, 5.6 g
Terminals	: Lead solderable per MIL-STD-202 Method 208
Mounting Torque	: 5 Inches lb maximum



Dimensions : Millimetres

Maximum Ratings and Electrical Characteristics :

Ratings at 25°C ambient temperature unless otherwise specified

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

For capacitive load, derate current by 20%

Single Phase Bridge Rectifier



CP6 Series

	CP600	CP601	CP602	CP606	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	600	V
Maximum RMS Bridge Input Voltage	35	70	140	420	
Maximum DC Blocking Voltage	50	100	200	600	
Maximum Average Forward Current at T _A = 50°C See Figure 2	6				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	125				
Maximum Forward Voltage Per Bridge Element Specified Current at 3 A dc and 50°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 1				μA mA
I ² t Rating for Fusing (t <8.35 ms)	127				A ² S
Typical Junction Capacitance Per Leg (Note 4) C _J	186				pF
Typical Thermal Resistance Per Leg (Note 3) R _{θJA} Typical Thermal Resistance Per Leg (Note 2) R _{θJC}	22 7.3				°C / W
Operating Temperature Range T _J	-55 to +125				°C
Storage Temperature Range T _A	-55 to +150				

Notes:

1. Bolt down on heat-sink with silicon thermal compound between bridge and mounting surface for maximum heat transfer with number 6 screw
2. Unit mounted on $5 \times 6 \times 0.11$ Inches thick ($14 \times 15 \times 0.3 \text{ cm}$) Aluminium plate
3. Unit mounted on PCB at 0.395 Inches (9.5 mm) lead length with 0.5×0.5 Inches ($12 \times 12 \text{ mm}$) copper pads
4. Measured at 1 MHz and applied reverse voltage of 4 V

Rating and Characteristics Curves

Figure 1 - Derating Curve for Output Rectified Current

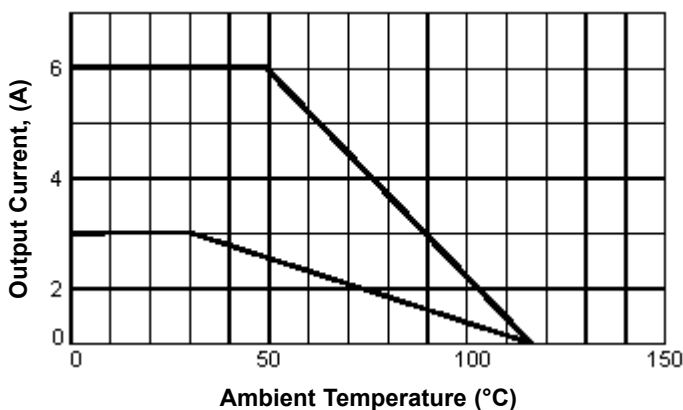
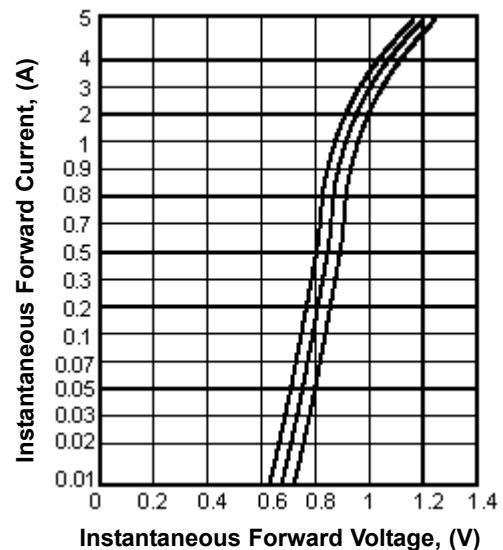


Figure 2 - Typical Instantaneous Forward Characteristics (25°C)



Single Phase Bridge Rectifier



CP6 Series

Figure 3 -Typical Peak Reverse Characteristics

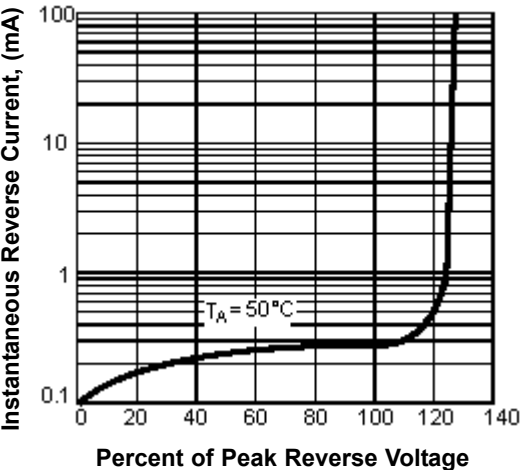
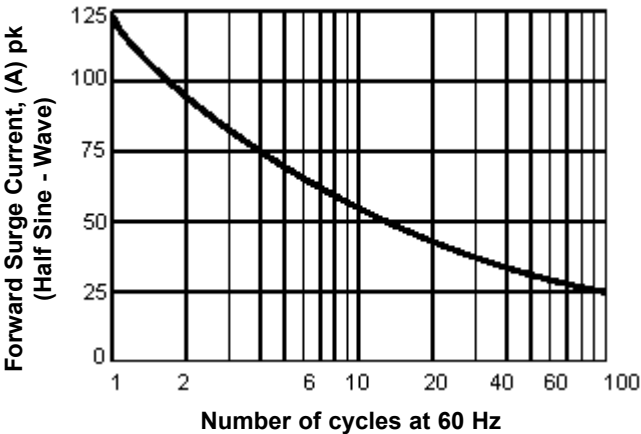


Figure 4 -Maximum Non- Repetitive Peak Forward Surge Current



Specifications

I_O (A) at $T_A = 50^\circ\text{C}$	I_{FSM} (A)	Body		Lead			Part Number
		Height	Width / Depth	Length	Spacing	Diameter (Typical)	
6	125	6.86	15.75	19.1	11.3	1.01	CP600
							CP601
							CP602
							CP606

Dimensions : Millimetres

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