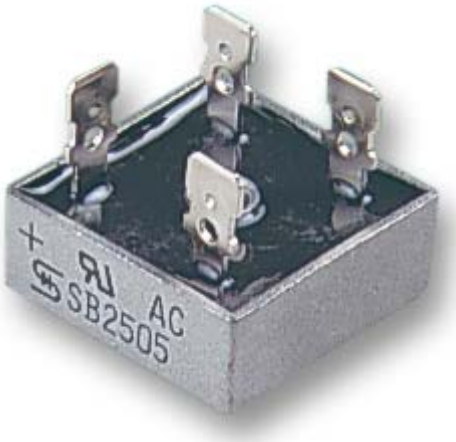


# CM5000 Series

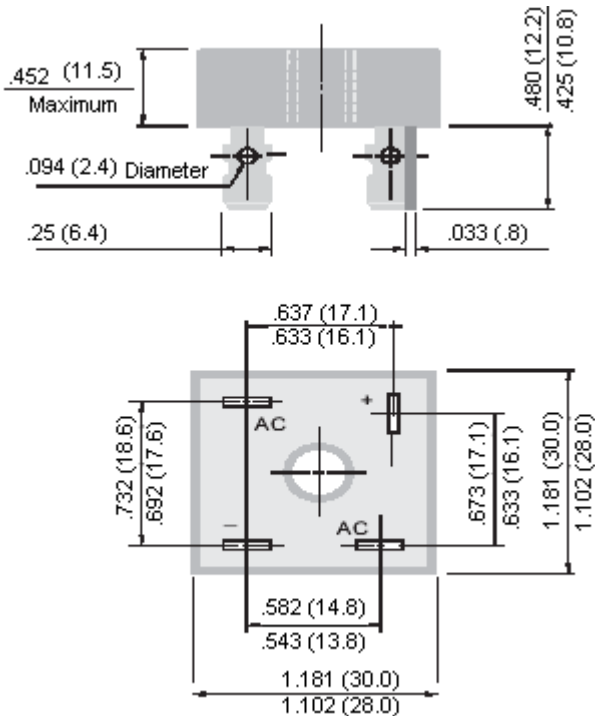
## Single Phase Bridge Rectifiers



### Features:

- Metal case for maximum heat dissipation.
- Surge overload ratings to 400 amperes.

### CM Series



Dimensions : Inches (Millimetres)

### Mechanical Data :

Case	: Metal.
Terminals	: Plated 25" Faston.
Mounting position	: Any.



# CM5000 Series

## Single Phase Bridge Rectifiers



### Maximum Ratings and Electrical Characteristics:

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Parameter	CM5000	CM5002	CM5006	CM50010	Unit
Maximum recurrent peak reverse voltage	50	200	600	1000	V
Maximum RMS bridge input voltage	35	140	420	700	
Maximum DC blocking voltage	50	200	600	1000	
Maximum average forward current $T_A = 55^\circ\text{C}$	50.0				A
Non-repetitive peak forward surge current, rated load	400				
Maximum forward voltage per bridge element specified current at 25A	1.2				V
Maximum reverse current at rated DC blocking voltage per element	10.0				$\mu\text{A}$
I <sup>2</sup> t rating for fusing (t < 8.35ms)	664				A <sup>2</sup> S
Typical thermal resistance (Figure 3) R $\theta$ JC	2.5				$^\circ\text{C}/\text{W}$
Operating temperature range $T_J$	-55 to +150				$^\circ\text{C}$
Storage temperature range $T_A$					

NOTE: \*Unit mounted on metal heat-sink.

### Rating and Characteristic Curves

Figure 1 Output Current VS. Case Temperature  
Resistive Or Inductive Load  $T_J = 150^\circ\text{C}$

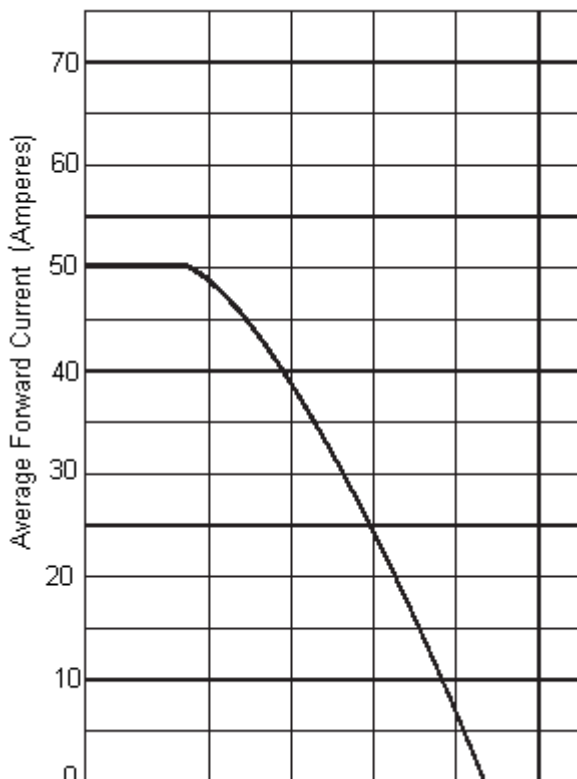
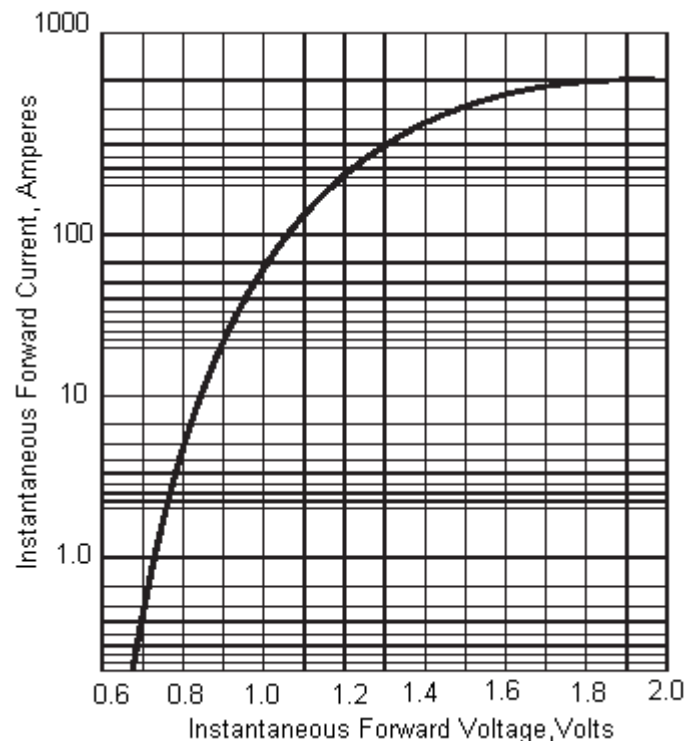


Figure 2 Typical Instantaneous Forward Characteristics at  $T_J = 25^\circ\text{C}$



# CM5000 Series

## Single Phase Bridge Rectifiers



Figure 3 Output Current VS. Ambient Temperature Resistive or Inductive Load Bridge Mounted on 8" x 8" Aluminium Plate 25" Thick

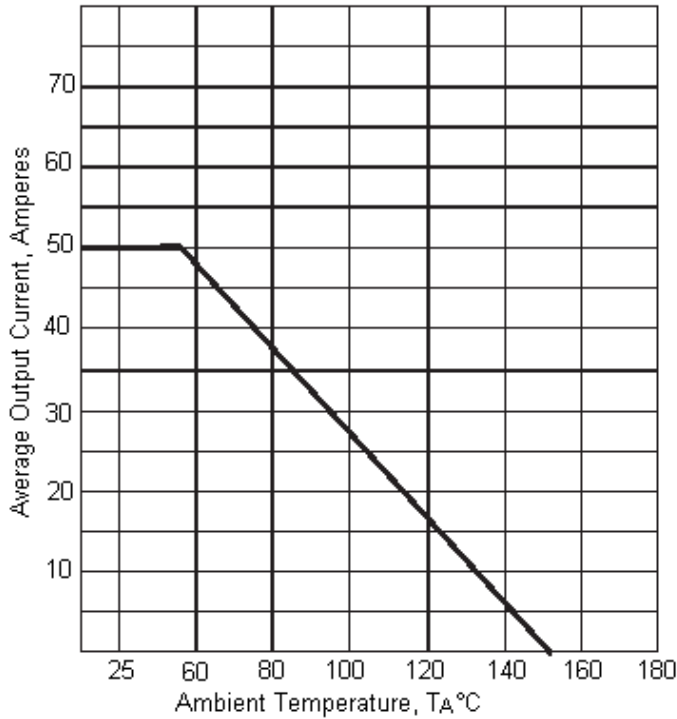
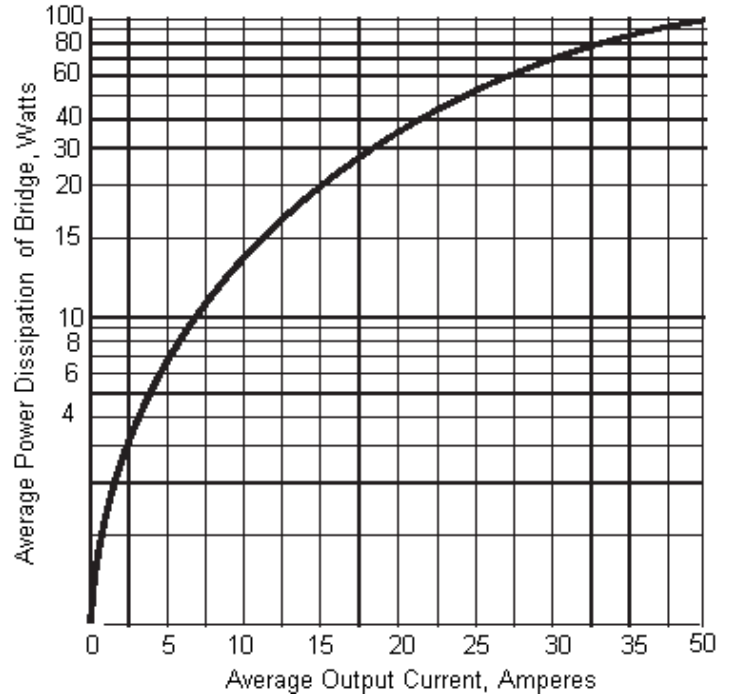


Figure 4 Power Dissipation VS. Average Output Current Resistive or Inductive Load T<sub>J</sub> = 150°C



### Specifications

Current Rating (A)	VRRM (V)	Maximum AC Input Voltage (V)	Part Number
50	50	35	CM5000
	200	140	CM5002
	600	420	CM5006
	1000	800	CM50010



# CM5000 Series

## Single Phase Bridge Rectifiers



### Notes:

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