

CM2500 Series

Single Phase Bridge Rectifiers

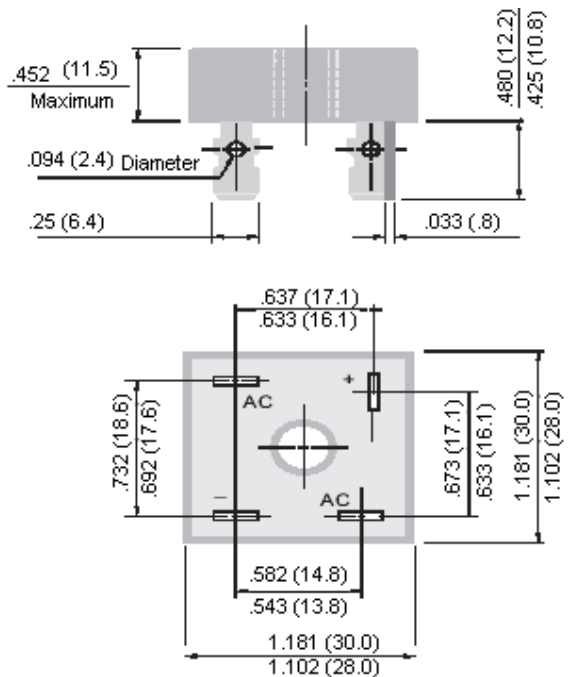
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Features:

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

CM Series



Dimensions : Inches (Millimetres)

Mechanical Data :

Case : Metal.
Mounting position : Any.

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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	CM2500	CM2501	CM2502	CM2504	CM2506	CM2508	CM25010	Unit
Maximum recurrent peak reverse voltage	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	35	70	140	280	420	560	700	
Maximum DC blocking voltage	50	100	200	400	600	800	1000	
Maximum average forward current at $T_A = 55^\circ\text{C}$	25.0							A
Non-repetitive peak forward surge current, rated load	300							
Maximum forward voltage per bridge element specified current at 12.5A	1.2							V
Maximum reverse current at rated DC blocking voltage per element	10.0							μA
I ² t rating for fusing (t < 8.35ms)	374							A ² S
Typical thermal resistance (Figure 3) R θ JC	2.5							$^\circ\text{C/W}$
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 $T_J = 150^\circ\text{C}$

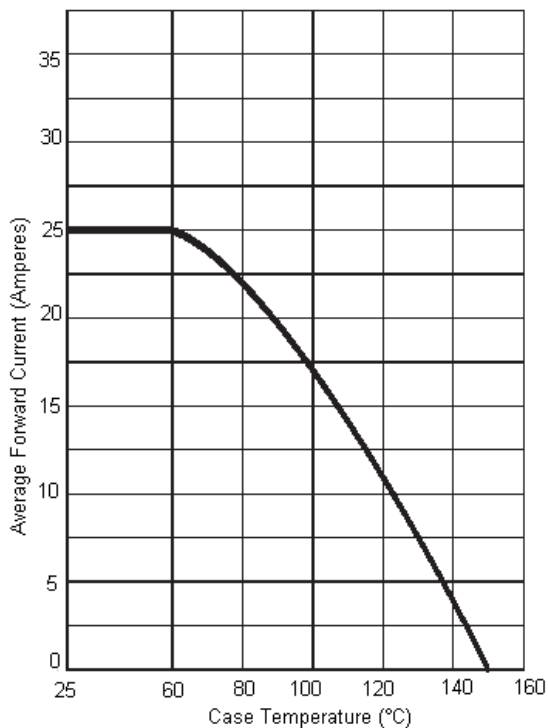
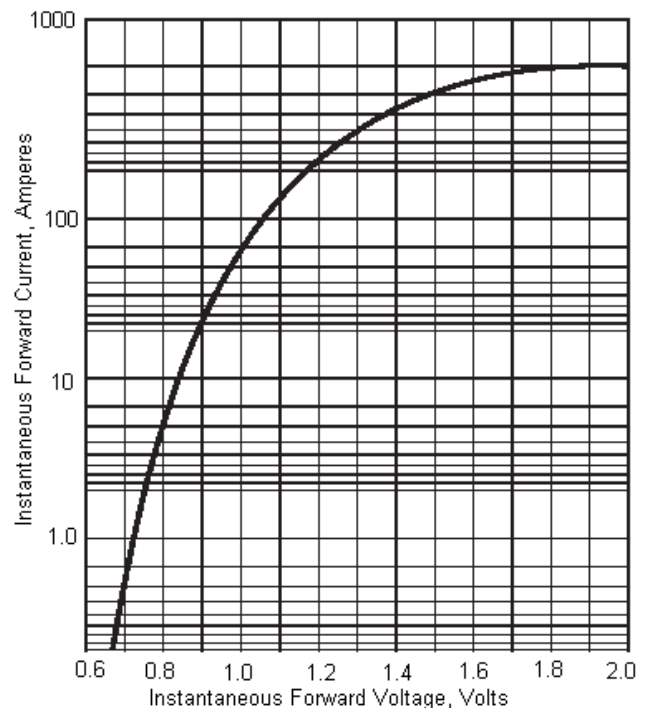


Figure 2 Typical Instantaneous Forward Characteristics at $T_J = 25^\circ\text{C}$



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

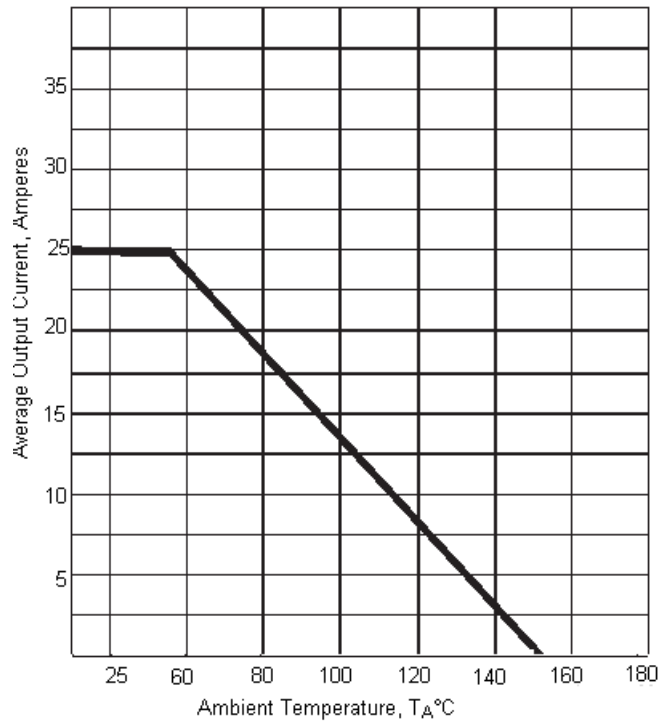
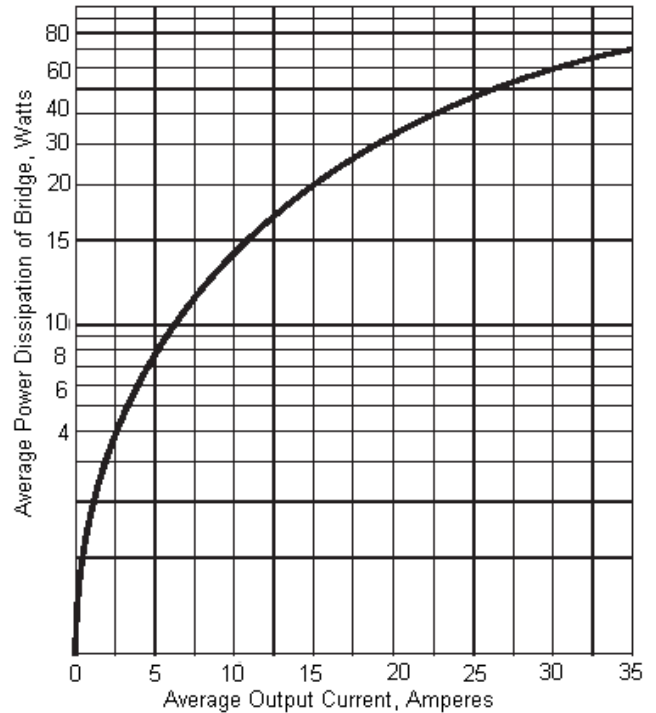


Figure 4 Power Dissipation VS. Average Output Current Resistive or Inductive Load $T_J = 150^\circ\text{C}$



Specifications

Current Rating (A)	VRRM (V)	Maximum AC Input Voltage (V)	Part Number
25	50	35	CM2500
	100	70	CM2501
	200	140	CM2502
	400	280	CM2504
	600	420	CM2506
	800	500	CM2508
	1000	800	CM25010



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Notes:

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