

Single Phase Bridge Rectifiers



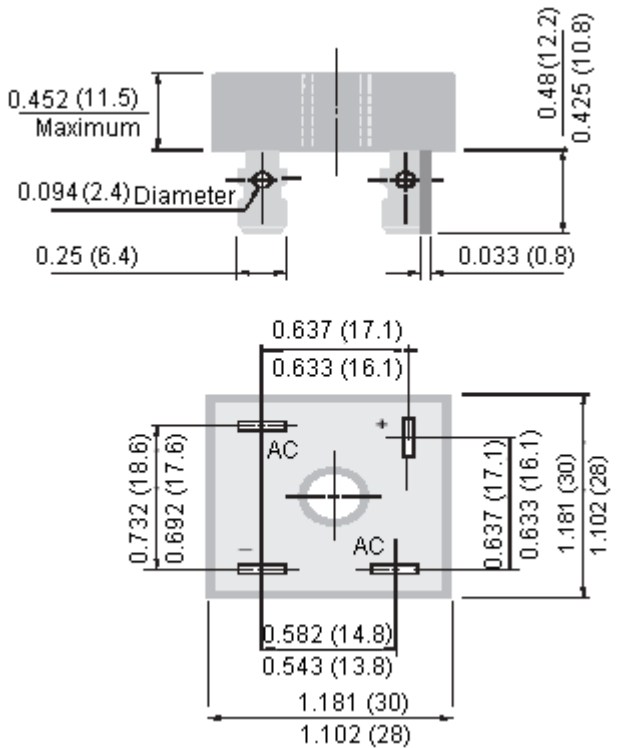
CM1500 Series



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 inches faston
Mounting Position : Any

Single Phase Bridge Rectifiers



CM1500 Series

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%

Parameter	CM1500	CM1501	CM1502	CM1504	CM1506	CM1508	Unit
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	
Maximum DC Blocking Voltage	50	100	200	400	800	800	
Maximum Average Forward Current at $T_A = 55^\circ\text{C}$	15						A
Non-repetitive Peak Forward Surge Current, Rated Load	300						
Maximum Forward Voltage Per Bridge Element Specified Current at 7.5 A	1.2						V
Maximum Reverse Current at Rated DC Blocking Voltage Per Element	10						μA
I^2t Rating for Fusing ($t < 8.35 \text{ ms}$)	374						A^2S
Typical Thermal Resistance (Figure 3) $R_{\theta\text{JC}}$	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 $T_J = 150^\circ\text{C}$

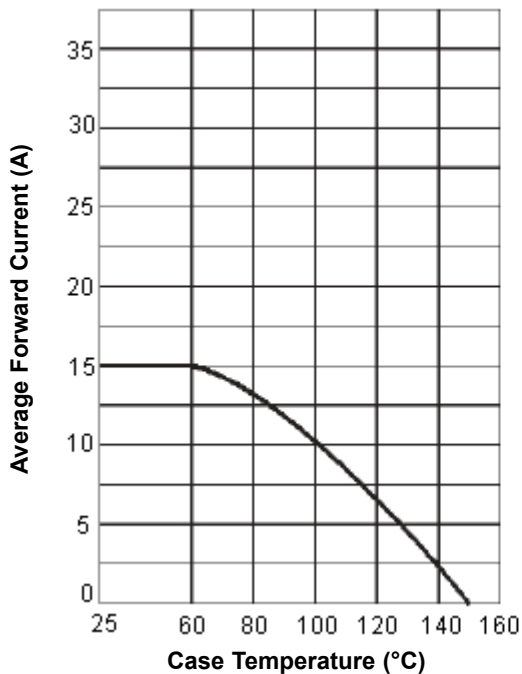
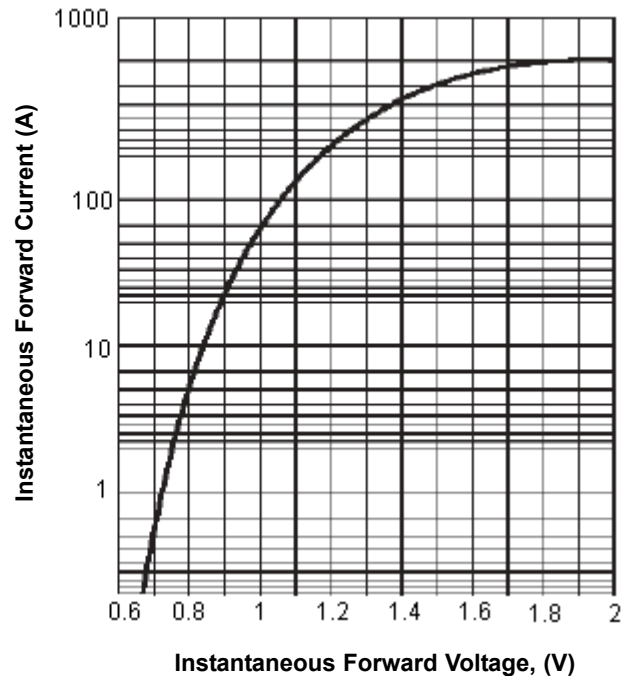


Figure 2 Typical Instantaneous Forward Characteristics at $T_J = 25^\circ\text{C}$



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

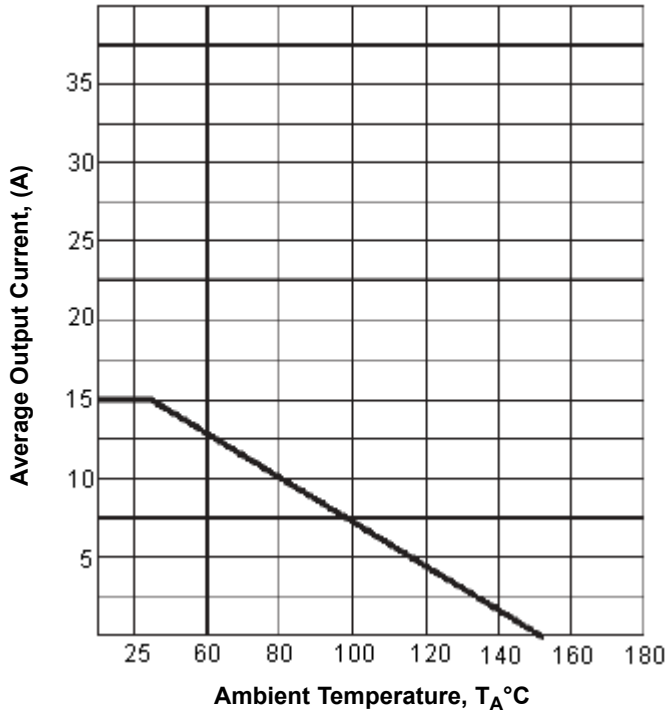
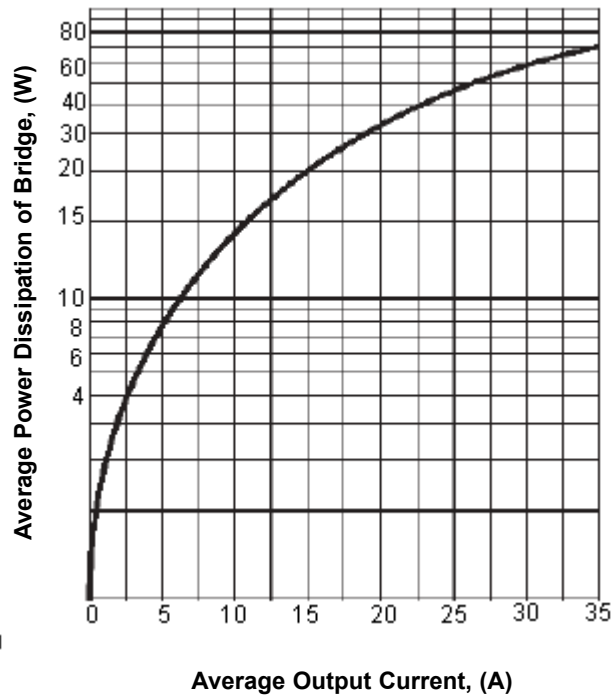


Figure 4 Power Dissipation VS. Average
Output Current Resistive or Inductive Load
 $T_J = 150^\circ\text{C}$



Specification Table

Current Rating (A)	VRRM (V)	Maximum AC Input Voltage (V)	Part Number
15	50	35	CM1500
	100	70	CM1501
	200	140	CM1502
	400	280	CM1504
	600	420	CM1506
	800	500	CM1508

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