



DATA SHEET

CM1500W~CM15010W

HIGH CURRENT SILICON BRIDGE RECTIFIERS

VOLTAGE - 50 to 1000 Volts CURRENT - 15 Amperes

Recognized File # E111753

FEATURES

- Metal Case for Maximum Heat Dissipation.
- Surge Overload Ratings to 400 Amperes.
- These bridges are on the U/L Recognized Products List for currents of 15 amperes.

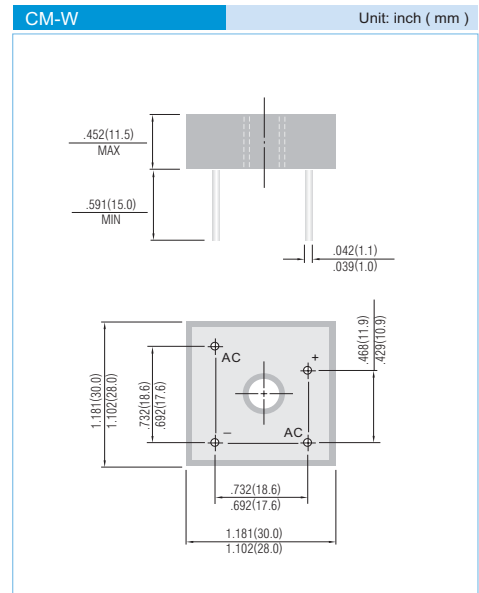
MECHANICAL DATA

Case: Metal

Mounting position: Any

Weight: 1 ounce, 30 grams

" W " Suffix Designates Wire Leads



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%

	CM1500W	CM1501W	CM1502W	CM1504W	CM1506W	CM1508W	CM15010W	UNITS
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	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Current $T_A=55^\circ\text{C}$	15.0							A
Non-repetitive Peak Forward Surge Current , rated load	300							A
Maximum Forward Voltage per Bridge Element Specified Current at 7.5A	1.2							V
Maximum Reverse Current at Rated DC Blocking Voltage per element	10.0							μA
I^2t Rating for fusing ($t < 8.35$ ms)	374							A^2S
Typical Thermal resistance (Fig 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	-55 to +150							$^\circ\text{C}$

NOTES: *Unit mounted on metal heat-sink



RATING AND CHARACTERISTIC CURVES

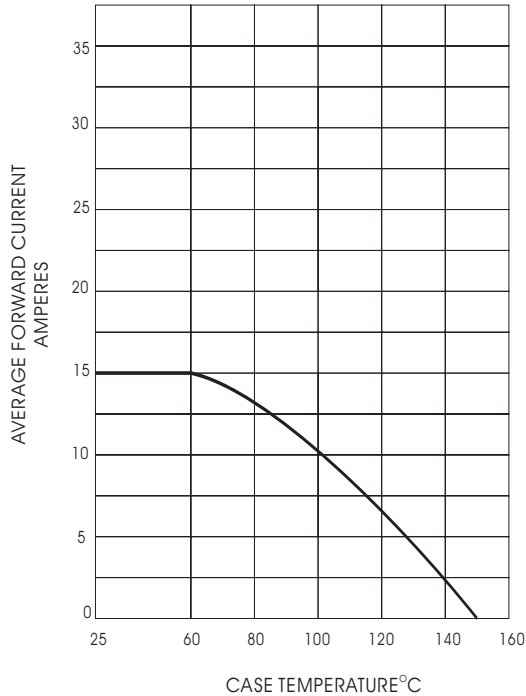


Fig. 1- OUTPUT CURRENT VS.CASE TEMPERATURE
RESISTIVE OR INDUCTIVE LOAD $T_J = 150^\circ\text{C}$

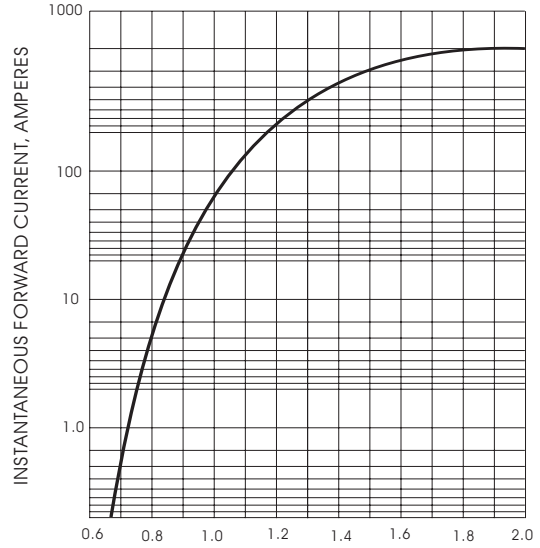


Fig. 2- TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS
AT $T_J = 25^\circ\text{C}$

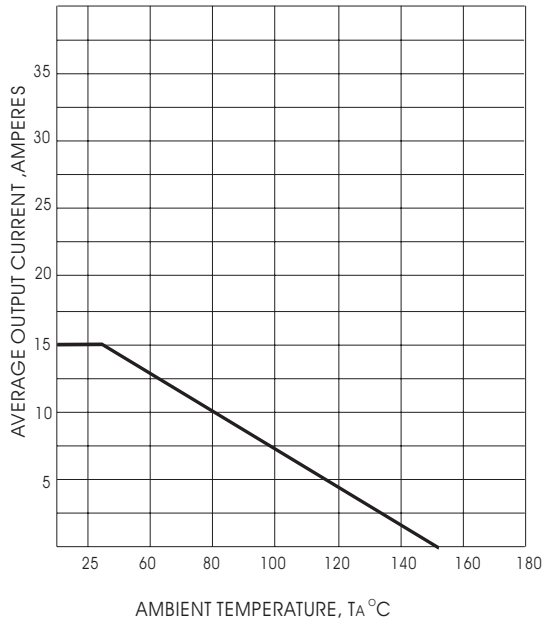


Fig. 3- OUTPUT CURRENT VS.AMBIENT TEMPERATURE
RESISTIVE OR INDUCTIVE LOAD
BRIDGE MOUNTED ON A 8" x 8" ALUMINUM PLATE 25"THICK

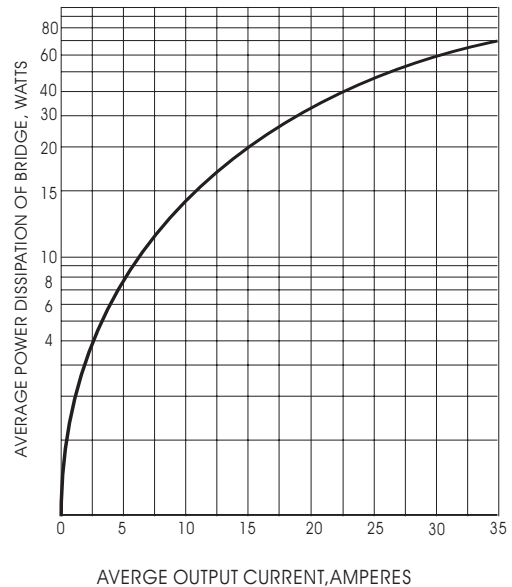


Fig. 4- POWER DISSIPATION VS.AVERAGE OUTPUT
CURRENT RESISTIVE OR INDUCTIVE LOAD
 $T_J = 150^\circ\text{C}$