

CM1000, 1500, 2500, 3500 SERIES

HIGH CURRENT SILICON BRIDGE RECTIFIERS

VOLTAGE - 50 to 800 Volts CURRENT - 10 to 35 Amperes

UL Recognized File #E111753

FEATURES

- Electrically Isolated 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 10, 25 and 35 amperes

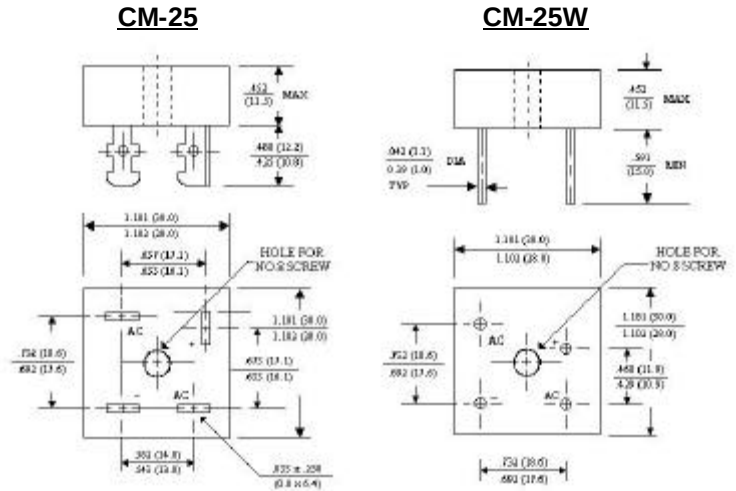
MECHANICAL DATA

Case: Metal, electrically isolated

Terminals: Plated .25" FASTON
or wire Lead $\leq$ 40 mils

Weight: 1 ounce, 30 grams

Mounting position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

		-00	-01	-02	-04	-06	-08	UNITS
Max Recurrent Peak Reverse Voltage		50	100	200	400	600	800	V
Max RMS Input Voltage		35	70	140	280	420	560	V
Max DC Blocking Voltage		50	100	200	400	600	800	V
Max Average Forward Current* for Resistive Load at TC=55 °C	CM10	10						A
	CM15	15						A
	CM25	25						A
	CM35	35						A
Non-repetitive Peak Forward Surge Current at Rated Load	CM10	200						A
	CM15	300						A
	CM25	300						A
	CM35	400						A
Max Forward Voltage per Bridge Element at Specified Current	CM10 5A CM15 I _F 7.5A CM25 12.5A CM35 17.5A	1.2						V
Max Reverse Leakage Current at Rated DC Blocking Voltage		10						µA
I ² t Rating for fusing (t < 8.3ms)	CM10 CM15 / CM35 CM25	374 / 664						A ² s
Typical Thermal Resistance (Fig. 3) R _{θJC}		2.5						°C/W
Operating Temperature Range T _J Storage Temperature Range T _{STG}		-55 to +150						°C

NOTES:

* Unit mounted on metal heat-sink

RATING AND CHARACTERISTIC CURVES

CM1000 THRU CM3500

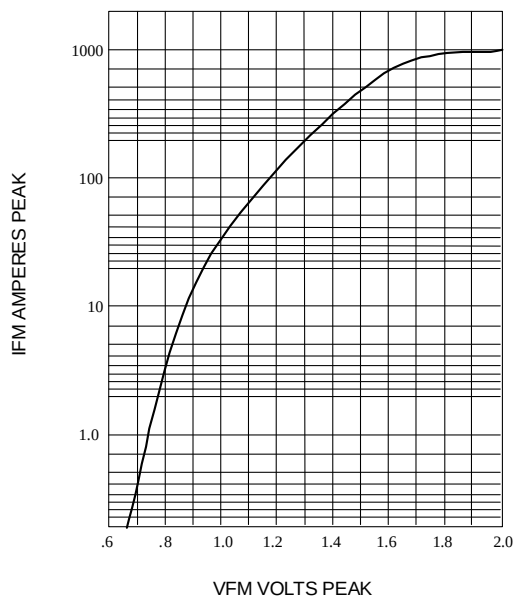


Fig. 1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS AT $T_j = 25\text{ }^{\circ}\text{C}$

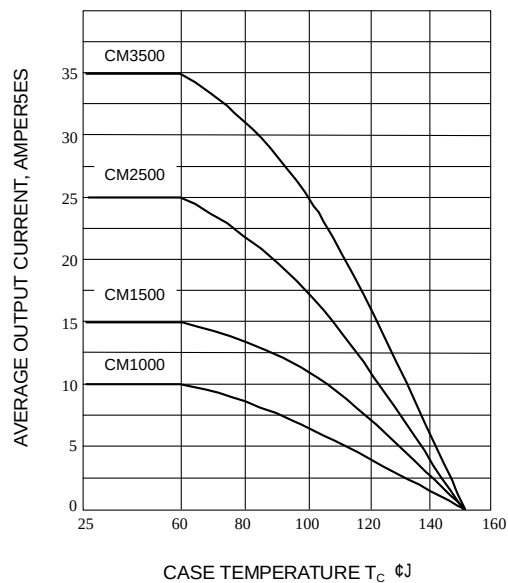


Fig. 2-OUTPUT CURRENT VS. CASE TEMPERATURE RESISTIVE OR INDUCTIVE LOAD $T_j = 150\text{ }^{\circ}\text{C}$

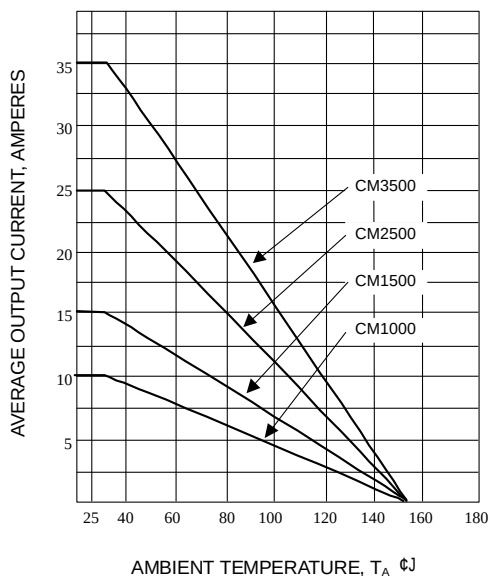


Fig. 3-OUTPUT CURRENT VS. AMBIENT TEMPERATURE RESISTIVE OR INDUCTIVE LOAD BRIDGE MOUNTED ON A 8"x8" ALUMINUM PLATE 25" THICK

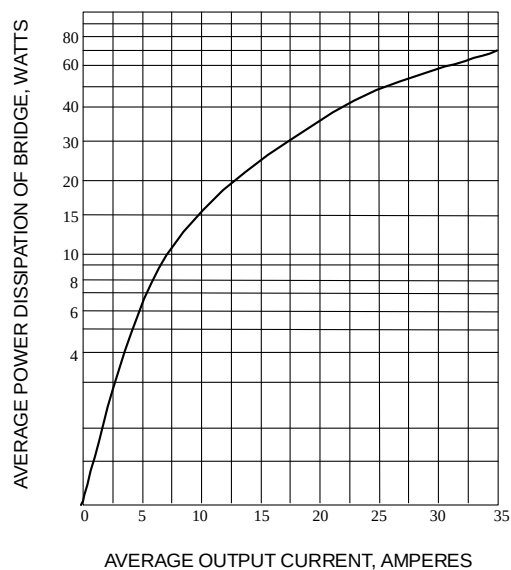


Fig. 4-POWER DISSIPATION VS. AVERAGE OUTPUT CURRENT RESISTIVE OR INDUCTIVE LOAD, $T_j = 150\text{ }^{\circ}\text{C}$