

CM1000, 1500, 2500, 3500 SERIES

HIGH CURRENT SILICON BRIDGE RECTIFIERS

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

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

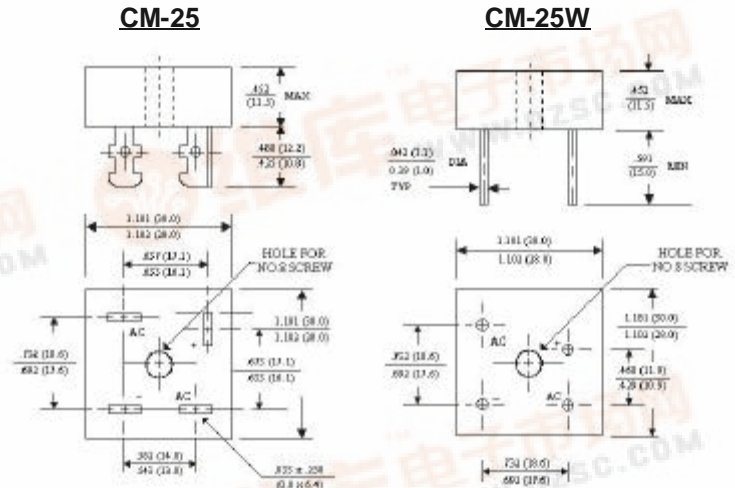
MECHANICAL DATA

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			1.2			V
	CM15 I _F 7.5A						
	CM25 12.5A						
	CM35 17.5A						
Max Reverse Leakage Current at Rated DC Blocking Voltage				10			µg A
I ² t Rating for fusing (t < 8.3ms)	CM10			374 / 664			A ² s
	CM15 / CM35						
	CM25						
Typical Thermal Resistance (Fig. 3) R _{θc JC}				2.5			°C/W
Operating Temperature Range T _J				-55 to +150			°C
Storage Temperature Range T _{STG}							°C

NOTES:

* Unit mounted on metal heat-sink



RATING AND CHARACTERISTIC CURVES
 CM1000 THRU CM3500

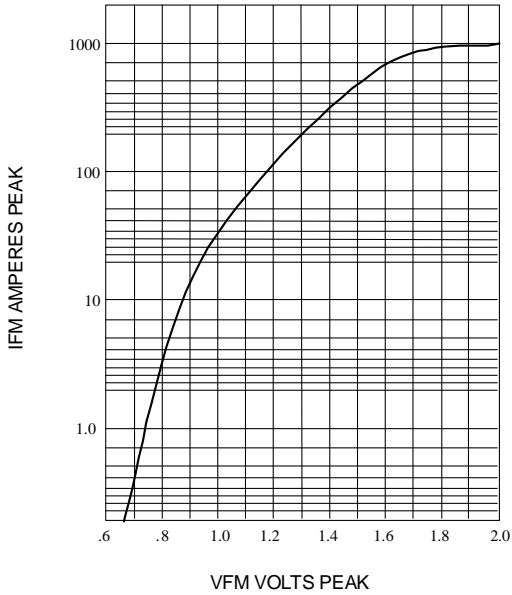


Fig. 1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS AT $T_J = 25 \text{ }^\circ\text{C}$

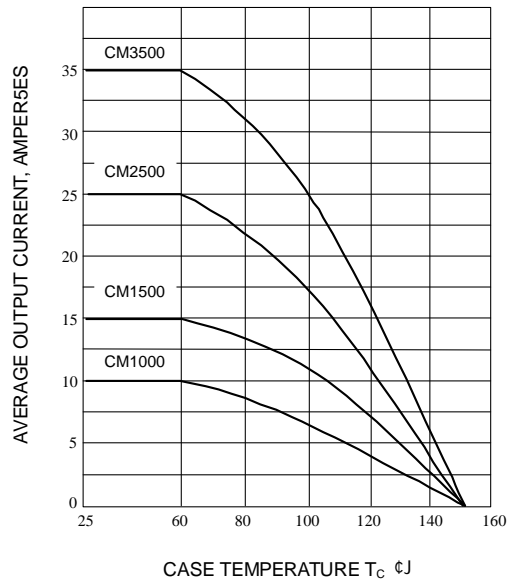


Fig. 2-OUTPUT CURRENT VS. CASE TEMPERATURE RESISTIVE OR INDUCTIVE LOAD $T_J = 150 \text{ }^\circ\text{C}$

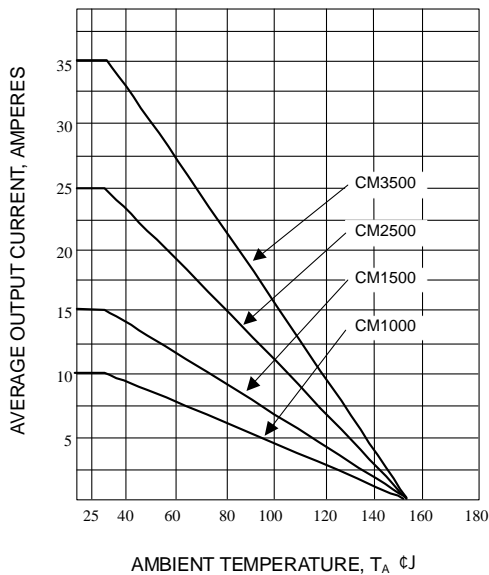


Fig. 3-OUTPUT CURRENT VS. AMBIENT TEMPERATURE RESISTIVE OR INDUCTIVE LOAD BRIDGE MOUNTED ON A 8"x8" ALUMINUM PLATE 25" THICK

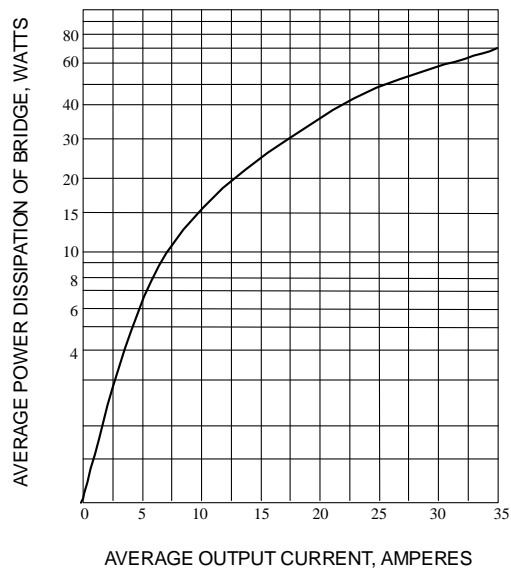


Fig. 4-POWER DISSIPATION VS. AVERAGE OUTPUT CURRENT RESISTIVE OR INDUCTIVE LOAD, $T_J = 150 \text{ }^\circ\text{C}$