

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

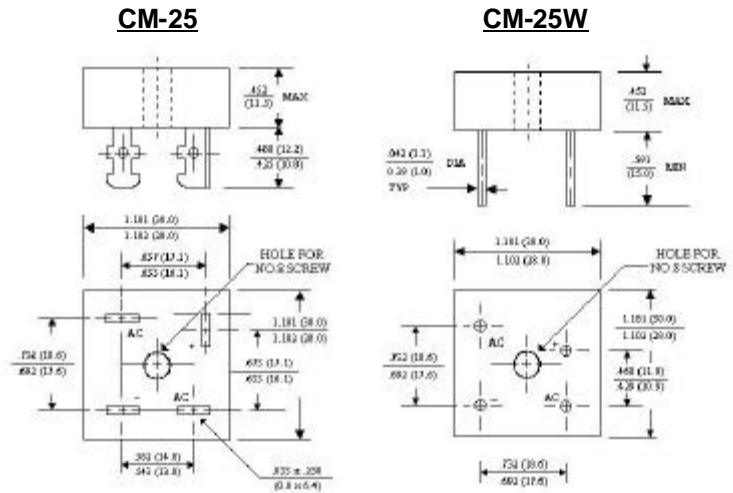
MECHANICAL DATA

Case: Metal, electrically isolated

Terminals: Plated .25" FASTON or wire Lead ϕ 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 $T_C=55 \text{°C}$	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				μ A
I^2t Rating for fusing ($t < 8.3\text{ms}$)	CM10 CM15 / CM35 CM25			374 / 664				A^2s
Typical Thermal Resistance (Fig. 3) $R_{\theta JC}$				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

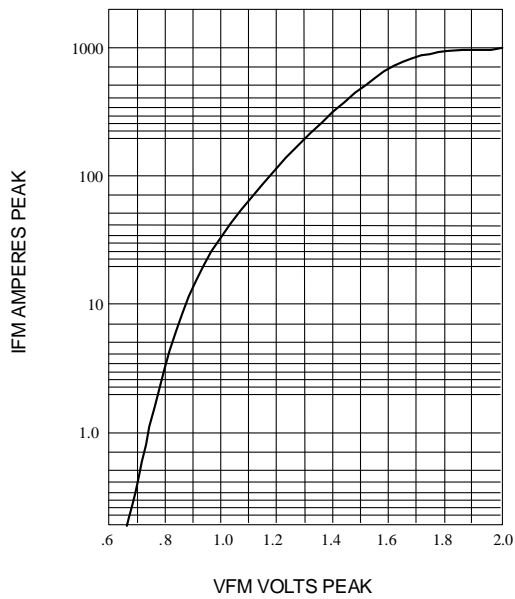


Fig. 1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS AT $T_J = 25\text{ }^\circ\text{C}$

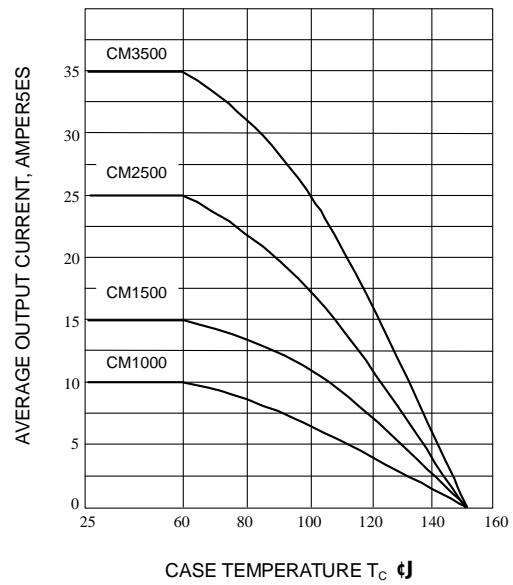


Fig. 2-OUTPUT CURRENT VS. CASE TEMPERATURE RESISTIVE OR INDUCTIVE LOAD $T_J = 150\text{ }^\circ\text{C}$

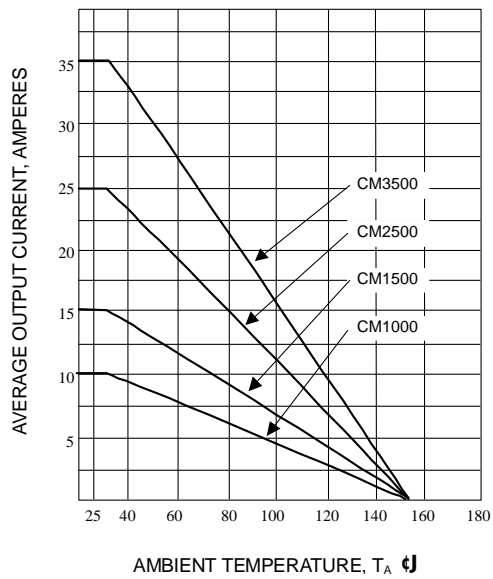


Fig. 3-OUTPUT CURRENT VS. AMBIENT TEMPERATURE RESISTIVE OR INDUCTIVE LOAD BRIDGE MOUNTED ON A 8"x8" ALUMINUM PLATE 25" THICK

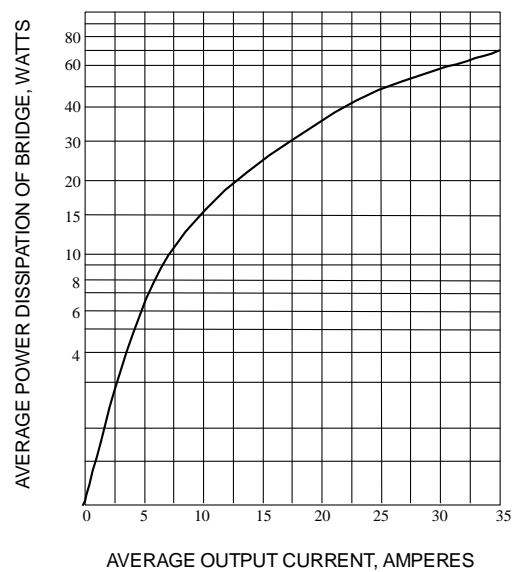


Fig. 4-POWER DISSIPATION VS. AVERAGE OUTPUT CURRENT RESISTIVE OR INDUCTIVE LOAD, $T_J = 150\text{ }^\circ\text{C}$