To:

CM1000, 1500, 2500, 3500, 4000, 5000 SERIES

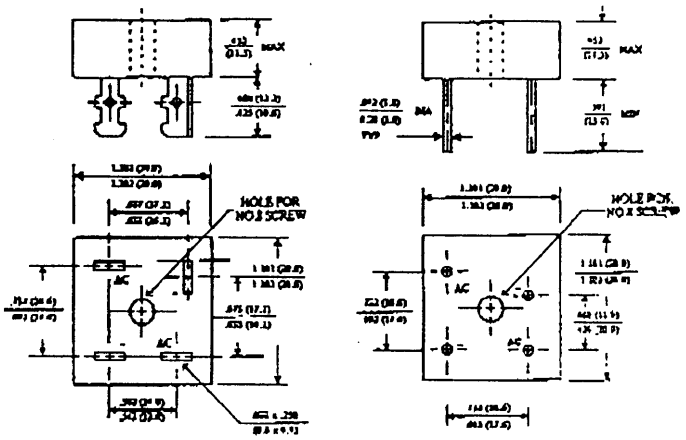
HIGH CURRENT SILICON BRIDGE RECTIFIERS

VOLTAGE - 50 to 1000 Volts CURRENT - 10 to 50 Amperes

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

CM-25 CM-25W



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Metal, electrically isolated

Terminals: Plated .25" FASTON or wire Lead ϕ 40 mils

Weight: 1 ounce, 30 grams

Mounting position: Any

MACXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ 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	-010	UNITS
Max Recurrent Peak Reverse Voltage		50	100	200	400	600	800	1000	V
Max RMS Input Voltage		35	70	140	280	420	560	800	V
Max DC Blocking Voltage		50	100	200	400	600	800	1000	V
Max Average Forward Current* for Resistive Load at TC=55℃	CM10				10				A
	CM15				15				A
	CM25				25				A
	CM35				35				A
	CM40				40				A
	CM50				50				A
Non-repetitive Peak Forward Surge Current at Rated Load	CM10				200				A
	CM15				300				A
	CM25				300				A
	CM35				400				A
	CM40				500				A
	CM50				500				A
Max Forward Voltage per Bridge Element at Specified Current	CM10 5A CM15 I_F 7.5A CM25 12.5A CM35 17.5A CM40 20A CM50 25A				1.2				V
Max Reverse Leakage Current at Rated DC Blocking Voltage					10				μA
I^2t Rating for fusing (t < 8.3ms)	CM10, CM15, CM25				374				A^2s
	CM35				664				
	CM40, CM50				750				
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

PANJIT

NOTES:

* Unit mounted on metal heat-sink

RATING AND CHARACTERISTIC CURVES
CM1000 THRU CM5000

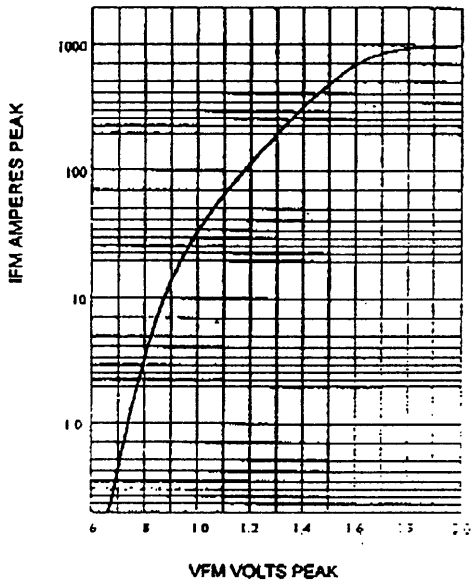


Fig. 1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS AT T_J = 25°C

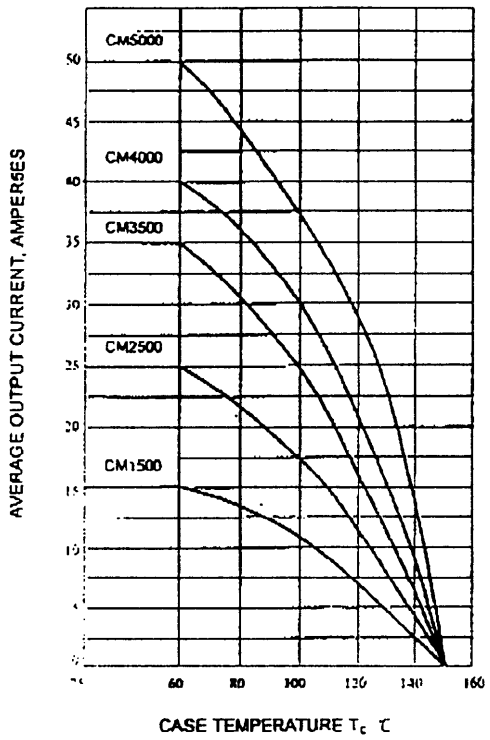


Fig. 2-OUTPUT CURRENT VS. CASE TEMPERATURE RESISTIVE OR INDUCTIVE LOAD T_J = 150°C

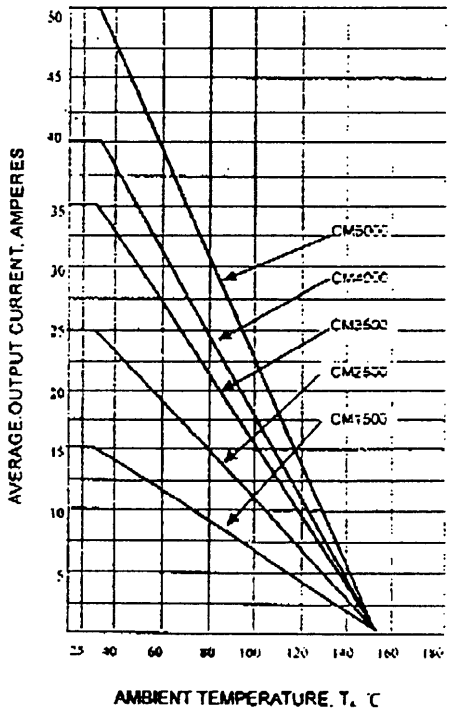


Fig. 3-OUTPUT CURRENT VS. AMBIENT TEMPERATURE RESISTIVE OR INDUCTIVE LOAD BRIDGE MOUNTED ON A 8"×8" ALUMINUM PLATE 25" THICK

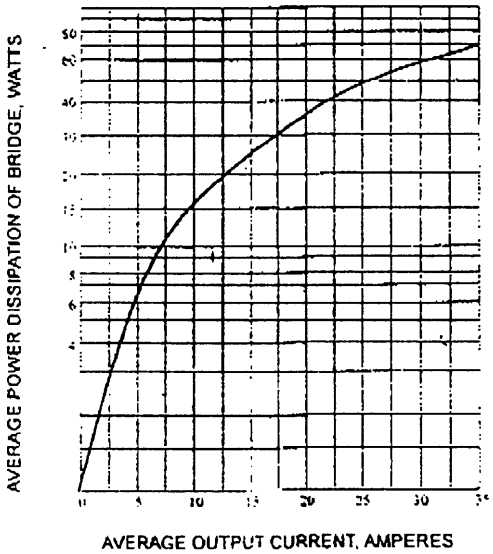


Fig. 4-POWER DISSIPATION VS. AVERAGE OUTPUT CURRENT RESISTIVE OR INDUCTI VE LOAD, T_J = 150°C