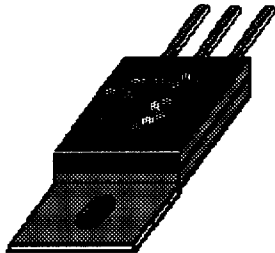


8.0 Amp SILICON CONTROLLED PLASTIC RECTIFIERS

10/93

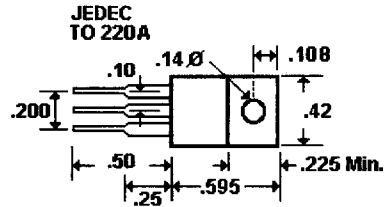
Description

CR800-2....- 8 Series



Mechanical Dimensions

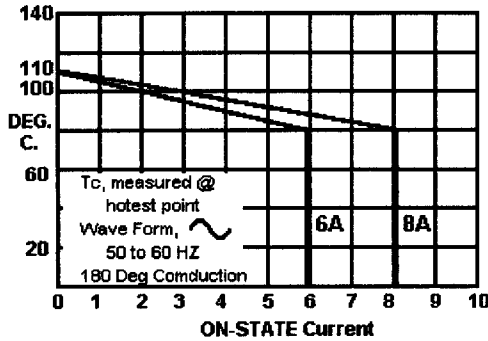
CR800-2....- 8 Series



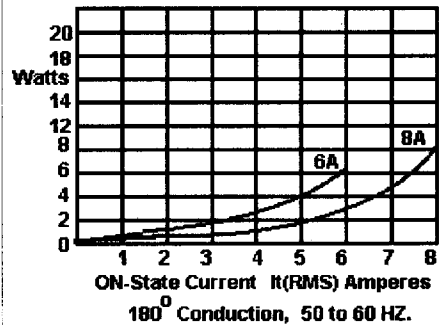
Features

- IC Compatible (TTL & MOS)
- Non-Sensitive gate Trigger
- Voltage Ratings From 50V to 600V
- Void Free Passivated Glass Passivated Chips

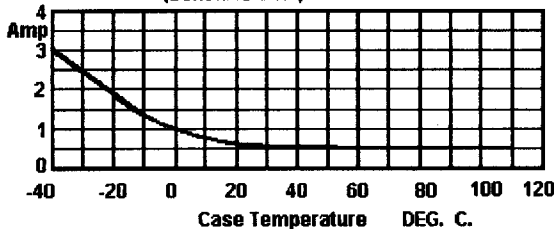
Maximum Allowable case Temperature vs. ON-STATE Current



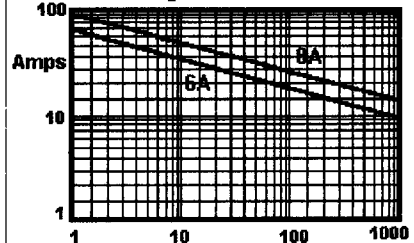
Maximum Conduction Power Disipation vs. ON-STATE Current



Typical Gate Current vs. Case Temperature (Sensitive Gate)



Peak Surge On State Current vs. Surge Current Duration



Surge current duration, full cycle @ 60HZ
 Current wave form 60 HZ, Sinesoidal
 Resistive load, I_T(rms) = Amps @ 50 Deg. C.

Gate control maybe lost during and after surge. Gate control will be regained after T_J returns to steady state value

FCI Semiconductor

8.0 Amp SILICON CONTROLLED PLASTIC RECTIFIERS

Preliminary Data Sheet

10/93

Electrical Characteristics @ 25 Deg. C.

Maximum Ratings

Repetitive Peak Offstate Voltage...VDRM _____

Maximum Repetitive Peak Reverse Voltage...VRRM _____

Tc = 125 C.

Tstg-40 to 150 deg. C. Toper.....-40 to 110 deg. C.

RMS On State Current I_t (rms) _____

Tc = 50 C., Conduction Angle 180 Deg.

Peak Surge Non-Repetitive On State Current I_{tSM} _____

One cycle at 50 or 60 HZ

Peak Gate Trigger Current I_{gtm} _____

3 uS Max

Peak Gate Power Dissipation P_{gm} _____

$I_{gt} = I_{gtm}$

Average Gate Power Dissipation $P_g(av)$ _____

Peak Off State Current I_{dRM} & $I_{rRM} = \text{Max.}$ _____

RG-K=1K ohms, VdRM & VrRM = Max.

Maximum On-State Voltage (Peak) V_{tm} _____

I_t = Rated Amps, TC = 25 C.

DC Holding Current I_{ho} _____

Gate Open & TC = 25 C.

Critical Rate of Rise of OFF State Voltage Critical Dv/Dt _____

Gate Open & TC = 110 C.

DC Gate Trigger Current for Anode I_{gt} _____

Voltage = 7VDC, RI = 100 ohms, TC = 25 C.

DC Gate Trigger Voltage for Anode V_{gt} _____

Voltage = 7VDC, RI = 100 ohms, TC = 25 C.

Gate Controlled Turn On Time ($T_d + Tr$) T_{gt} _____

I_t = 10 mA, TC = 25 C.

Thermal Resistance, Junction to case _____

Voltage	CR800-2.....- 8 Series	
50	CR800-2	Volts
100	CR800-3	Volts
200	CR800-4	Volts
400	CR800-6	Volts
600	CR800-8	Volts
		Volts
	8	Amp
	40	Amp
	1	Amp
	.5	Watt
	.2	Watt
	10	uAmp Max.
	200	uAmp Max.
	2.2	V - Max.
	5.0	mAmp Max.
	8.0	Volts/uS
	200	uA - Max.
	1.0	V - Max.
	2.2	uS
	2.2	Deg C/W

3719482 0000293 70T