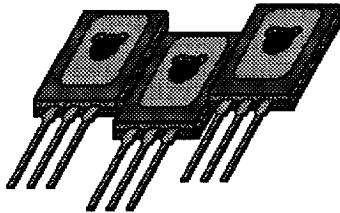


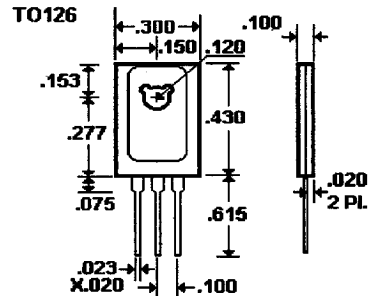
Description

TR410 & 425 Series



Mechanical Dimensions

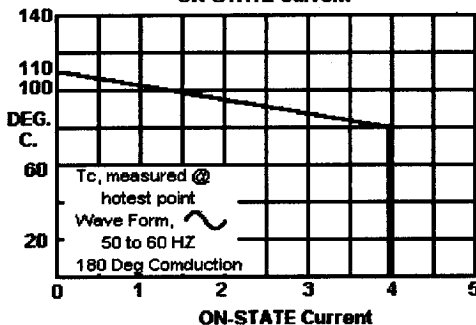
TR410 & 425 Series



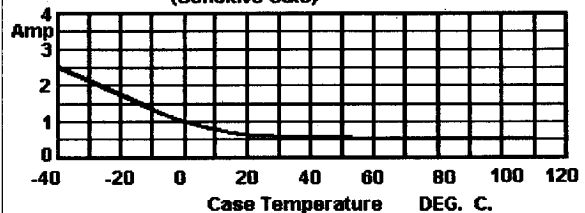
Features

- IC Compatible (TTL & MOS)
- Voltage Ratings From 200V to 600V
- Positive & Negative Gate Trigger Currents
- Void Free Passivated Glass Passivated Chips

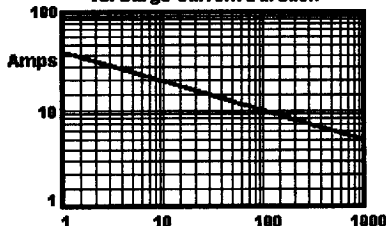
Maximum Allowable case Temperature vs. ON-STATE Current



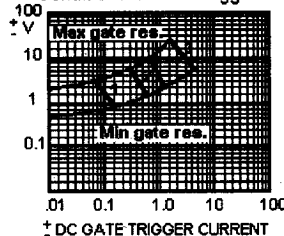
Typical Gate Current vs. Case Temperature (Sensitive Gate)



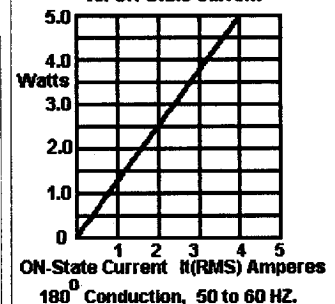
Peak Surge On State Current vs. Surge Current Duration



Gate trigger Characteristics & Limiting Conditions of Gate trigger Pulse



Maximum Conduction Power Disipation vs. ON-State Current



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

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

FCI Semiconductor **ADVANCED Data Sheet** **TR410 & 425 Series** **4.0 Amp PLASTIC SILICON TRIACS**

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Electrical Characteristics @ 25 Deg. C.

Maximum Ratings

Repetitive Peak Offstate Voltage...VDRM

Maximum Repetitive Peak Reverse Voltage...VRRM
Tc = 125 C.

RMS On State Current I_{t(rms)}

Tc = 80 C., Conduction Angle 360 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 Disipation P_{gsm}

I_{gt} ≤ I_{gtm}

Average Gate Power Disipation P_{g(av)}

Peak Off State Current I_{drm} & I_{rrm} TC = 110 Deg. C.

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.

Critical Rate of Rise of Commutating Voltage Critical Dv/Dt

Gate Open & TC = 80 C., Unenergized V_d = V_{drm}, I_t = I_{t(RMS)}

DC Gate Trigger Current..... I_{gt}

V_d = 12VDC, R_i = 60 ohms, TC = 25 C.

DC Gate Trigger Voltage..... V_{gt}

V_d = 12VDC, R_i = 60 ohms, TC = 25 C.

Gate Controlled Turn On Time..... T_{gt}

V_d = V_{drm}, I_{gt} = 80 mA, T_r = 0.1 uSec, I_t = 6 A (Peak), TC = 25 C.

Thermal Resistance, Junction to case

Storage Temperature.....T_{stg}

Operating Temperature.....T_{oper}

Voltage	TR410 & 425 Series
200	TR410-4 TR425-4
400	TR410-6 TR425-6
600	TR410-8 TR425-8
Volts	
Volts	
Volts	
Volts	
Amp	4.0
Amp	40
Amp	1.2
Amp	15
Watt	0.3
Watt	0.5
uAmp	1.6
V - Max	15
mA Max	15
V / uS	15
V / uS	1.0
mA Max	10
Vout - Max	2.0
uSec.	3.0
Deg. C./ Watt	4.0
	-40 to 150 deg. C
	-40 to 110 deg. C.

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