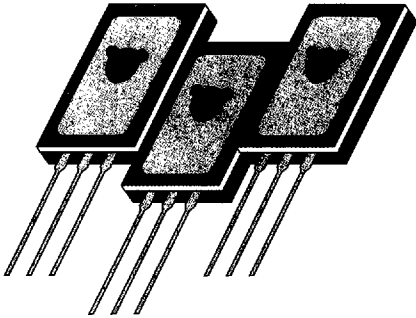


TR410 & 425 Series

4.0 AMP PLASTIC SILICON TRIACS

Description

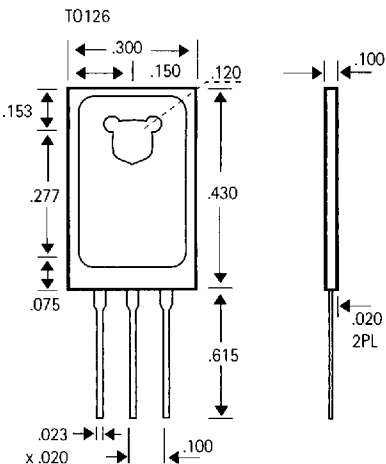


Features:

- IC Compatible
- Non-Sensitive gate Trigger
- Voltage Ratings from 200 to 600V
- Void Free Passivated Glass Passivated Chips

Mechanical Details

all dimensions in inches



TR410 & 425 Series

TR410 & 425 Series

Maximum Ratings

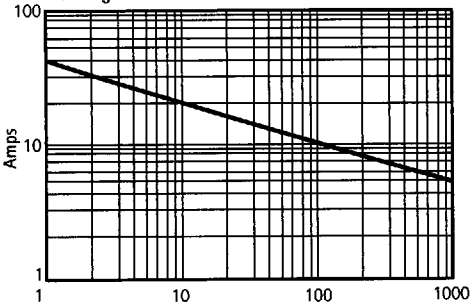
Electrical Characteristics @ 25°C

	Voltage TR410 & 425 Series			
	200	400	600	
V_{DRM}	TR410-4	TR425-6	TR425-8	Volts
V_{RRM}	TR410-6	TR425-6	TR425-8	Volts
	TR410-8	TR425-8	TR425-8	Volts
V_{DRM}	Repetitive Peak Off-state Voltage			Volts
V_{RRM}	Maximum Repetitive Peak Reverse Voltage			Volts
	Tc = 125 C			
$I_{T(RMS)}$	RMS On State Current			Amp
	4.0	4.0		
	Tc = 80 C., Conduction Angle 360 Deg.			
I_{TSM}	Peak Surge Non-Repetitive On State Current			Amp
	40	40		
	One cycle at 50 or 60Hz			
I_{GTM}	Peak Gate Trigger Current / 3 uS Max			Amp
	1.2	1.2		
P_{GM}	Peak Gate Power Dissipation / 1gt </= 1gtm			Watt
	15	15		
$P_{G(AV)}$	Average Gate Power Dissipation			Watt
	0.3	0.3		
I_{DRM}	Peak Off-State Current			uAmp
	0.5	0.5		
I_{RRM}	TC = 110°C			
V_{TM}	Maximum On-State Voltage (Peak)			V Max
	1.6	1.6		
	It = Rated Amps, TC = 25 C			
I_{HO}	DC Holding Current			mA Max
	15	25		
	Gate Open & TC = 25 C			
Dv/Dt	Critical Rate of Rise of OFF State Voltage			V/uS
	15	25		
	Gate Open & TC = 110 C			
Dv/Dt	Critical Rate of Rise of Commutating Voltage			V/uS
	1.0	1.0		
	Gate Open & TC = 80 C., Unenergized Vd = Vdrm, It = It(RMS)			
I_{GT}	DC Gate Trigger Current			mA Max
	10	25		
	V _D = 12 VDC, R _I = 60 Ohms, TC = 25 C			
V_{GT}	DC Gate Trigger Voltage			Vout Max
	2.0	2.0		
	VD = 12VDC, RI = 60 Ohms, TC = 25 C			
T_{GT}	Gate Controlled Turn On Time			uSec
	3.0	3.0		
	VD = VDRM, IGT = 80 MA, TR = 0.1 uSec, It = 6A (Peak), TC = 25C			
	Thermal Resistance, Junction to case			°C/W
	4.0	4.0		
T_{STG}	Storage Temperature			°C
	-40 to 150°C	-40 to 150°C		
T_{OPER}	Operating Temperature			°C
	-40 to 110°C	-40 to 110°C		

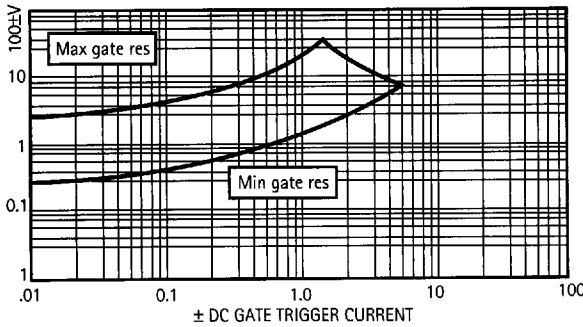
TR410 & 425 Series

TR410 & 425 Series

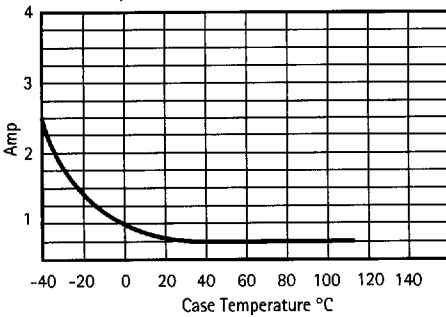
Peak Surge On State Current VS Surge Current Duration



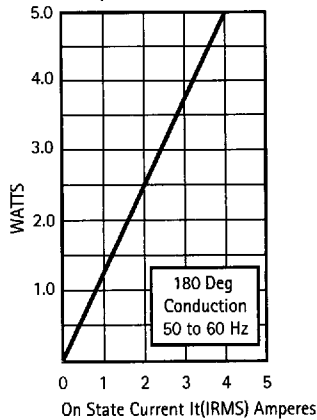
Gate Trigger Characteristics & Limiting Conditions of Gate Trigger



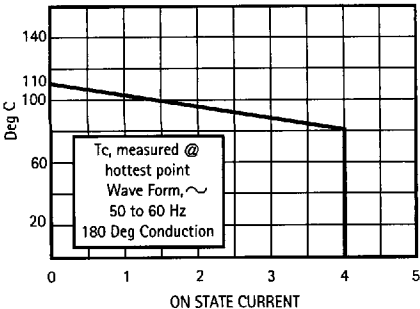
Typical Gate Current VS Case Temperature (Sensitive Gate)



Maximum Conduction Power Dissipation VS On-State Current



Max Allowable case Temp VS On-State Current



Gate control may be 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 60Hz, Sinesoidal.
Resistive load, I_{t(rms)} = Amps 2 50°C.