



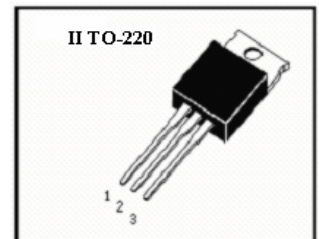
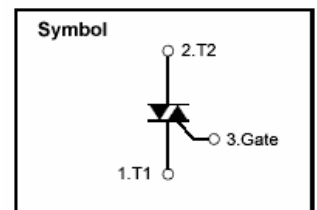
INNER INSULATED TYPE TRIAC (II TO-220 PACKAGE)

Features

- * Repetitive Peak Off-State Voltage: 600V
- * R.M.S On-State Current($I_{T(RMS)}=6A$)
- * High Commutation dv/dt
- * Isolation Voltage ($V_{ISO}=2500V$ AC)

General Description

This device is fully isolated package suitable for AC switching application, phase control application such as fan speed and temperature modulation control, lighting control and static switching relay.



Absolute Maximum Ratings ($T_a=25$)

T_{stg} —Storage Temperature.....	-40~150
T_j —Operating Junction Temperature	-40~125
P_{GM} —Peak Gate Power Dissipation.....	5W
V_{DRM} —Repetitive Peak Off-State Voltage.....	600V
I_T (RMS) —R.M.S On-State Current ($T_c=94$)	6A
V_{GM} —Peak Gate Voltage.....	10V
I_{GM} —Peak Gate Current.....	2.0A
I_{TSM} —Surge On-State Current (One Cycle, 50/60Hz,Peak,Non-Repetitive)	60/66A
V_{ISO} —RMS Isolation Breakdown Voltage.....	2500V

Electrical Characteristics ($T_a=25$)

Symbol	Items	Min	Max	Unit	Conditions
I_{DRM}	Repetitive Peak Off-State Current		1.0	mA	$V_D=V_{DRM}$, Single Phase, Half Wave, $T_j=125$
V_{TM}	Peak On-State Voltage		1.6	V	$I_T=8A$, Inst. Measurement
I_{+GT1}	Gate Trigger Current ()		10	mA	$V_D=6V$, $R_L=10$ ohm
I_{-GT1}	Gate Trigger Current ()		10	mA	$V_D=6V$, $R_L=10$ ohm
I_{-GT3}	Gate Trigger Current ()		10	mA	$V_D=6V$, $R_L=10$ ohm
V_{+GT1}	Gate Trigger Voltage ()		1.5	V	$V_D=6V$, $R_L=10$ ohm
V_{-GT1}	Gate Trigger Voltage ()		1.5	V	$V_D=6V$, $R_L=10$ ohm
V_{-GT3}	Gate Trigger Voltage ()		1.5	V	$V_D=6V$, $R_L=10$ ohm
V_{GD}	Non-Trigger Gate Voltage	0.2		V	$T_j=125$, $V_D=1/2V_{DRM}$
$(dv/dt)_c$	Critical Rate of Rise of Off-State Voltage at Commutation	5.0		V/ μ S	$T_j=125$, $V_D=2/3V_{DRM}$ $(di/dt)_c=3A/ms$
I_H	Holding Current	10		mA	
$R_{th(j-c)}$	Thermal Resistance		3.8	/W	Junction to case



Performance Curves

Fig 1. Gate Characteristics

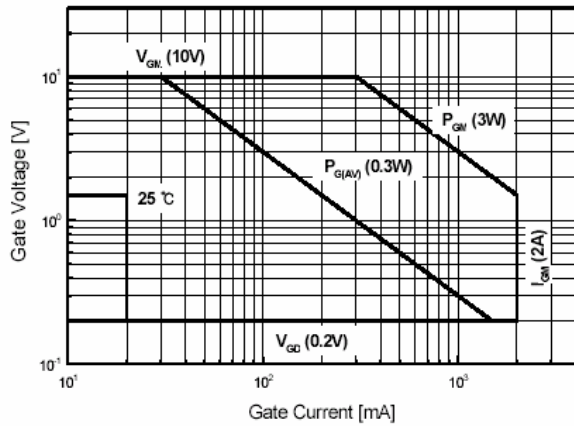


Fig 2. On-State Voltage

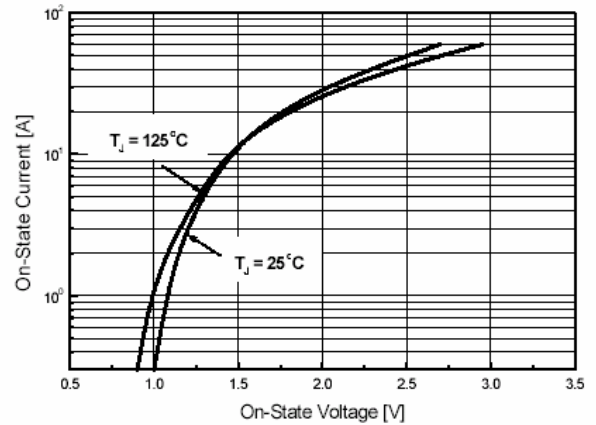


Fig 3. On State Current vs. Maximum Power Dissipation

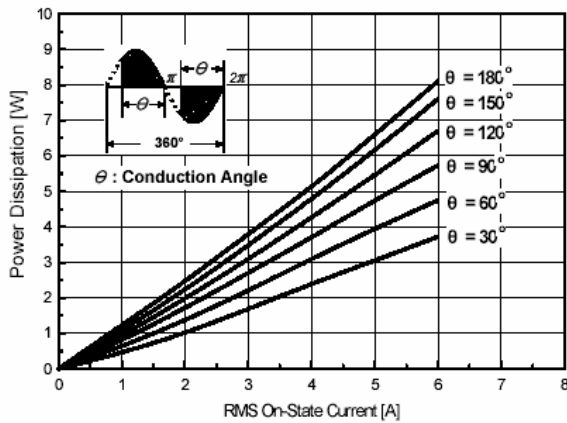


Fig 4. On State Current vs. Allowable Case Temperature

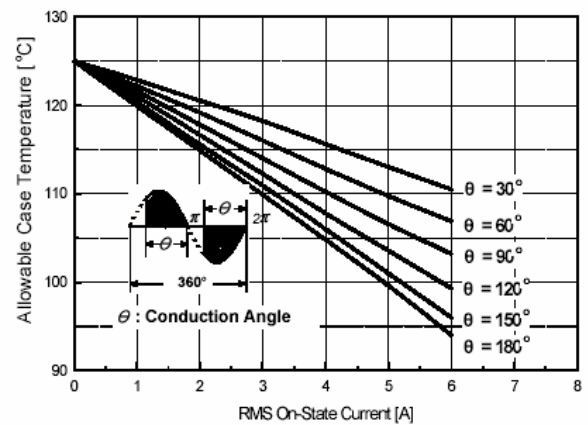


Fig 5. Surge On-State Current Rating (Non-Repetitive)

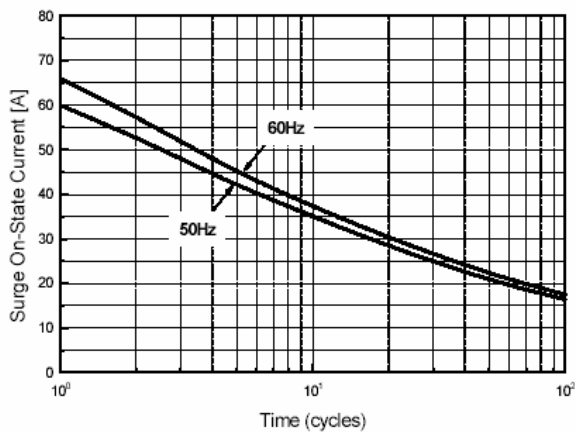


Fig 6. Gate Trigger Voltage vs. Junction Temperature

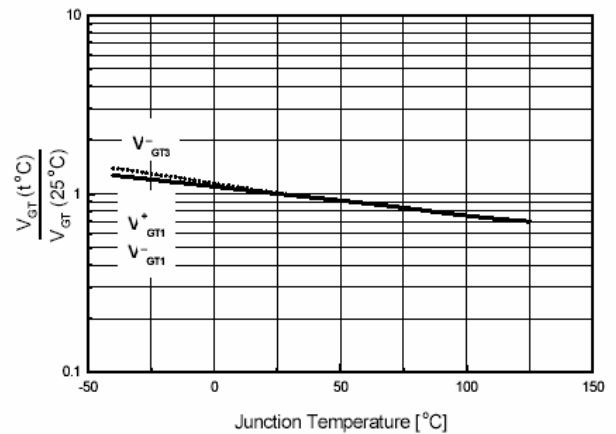




Fig 7. Gate Trigger Current vs. Junction Temperature

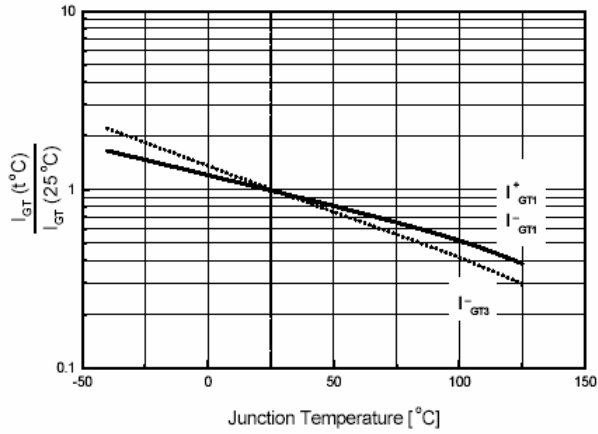


Fig 8. Transient Thermal Impedance

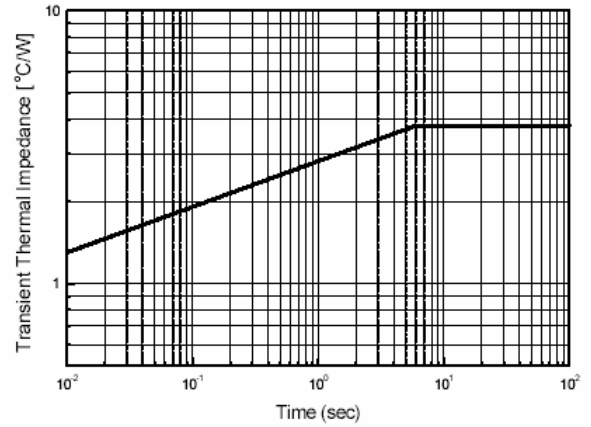
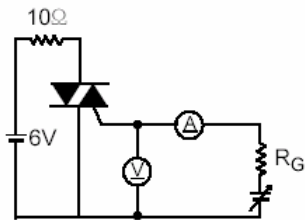
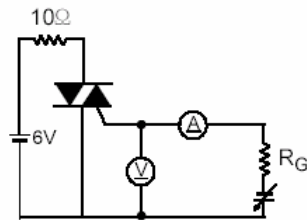


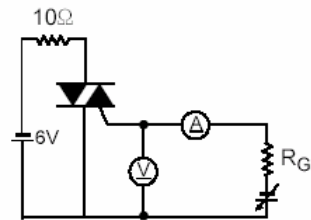
Fig 9. Gate Trigger Characteristics Test Circuit



Test Procedure I



Test Procedure II



Test Procedure III