



NON INSULATED TYPE TRIAC (T0-126 PACKAGE)

Features

- * Repetitive Peak Off-State Voltage: 600V
- * R.M.S On-state Current($I_{T(RMS)}=2A$)
- * High Commutation dv/dt

General Description

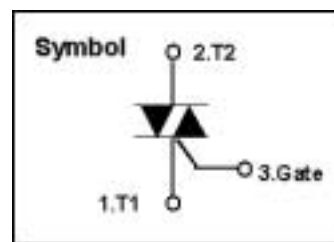
The Triac HTN2A60 is suitable for AC switching application, phase control application such as heater control, motor control, lighting control, and static switching relay.

Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

T_{stg} —Storage Temperature.....	-40~125
T_j —Operating Junction Temperature	-40~125
P_{GM} —Peak Gate Power Dissipation.....	1.0W
V_{DRM} —Repetitive Peak Off-State Voltage.....	600V
I_T (RMS) —R.M.S On-state Current ($T_a=66^\circ\text{C}$)	1.5A
V_{GM} —Peak Gate Voltage.....	6.0V
I_{GM} —Peak Gate Current.....	0.5A
I_{TSM} —Surge On-state Current (One Cycle, 50/60Hz,Peak,Non-Repetitive).....	13/15A

Electrical Characteristics ($T_a=25^\circ\text{C}$)

Symbol	Items	Min.	Typ.	Max.	Unit	Conditions
I_{DRM}	Repetitive Peak Off-State Current			0.5	mA	$V_D=V_{DRM}$, Single Phase, Half Wave, $T_j=125^\circ\text{C}$
V_{TM}	Peak On-State Voltage			1.6	V	$I_T=2.1A$, Inst. Measurement
I_{+GT1}	Gate Trigger Current ()			20	mA	$V_D=6V$, $R_L=10\text{ ohm}$
I_{-GT1}	Gate Trigger Current ()			20	mA	$V_D=6V$, $R_L=10\text{ ohm}$
I_{-GT3}	Gate Trigger Current ()			20	mA	$V_D=6V$, $R_L=10\text{ ohm}$
V_{+GT1}	Gate Trigger Voltage ()			1.5	V	$V_D=6V$, $R_L=10\text{ ohm}$
V_{-GT1}	Gate Trigger Voltage ()			1.5	V	$V_D=6V$, $R_L=10\text{ ohm}$
V_{-GT3}	Gate Trigger Voltage ()			1.5	V	$V_D=6V$, $R_L=10\text{ ohm}$
V_{GD}	Non-trigger Gate Voltage	0.2			V	$T_j=125^\circ\text{C}$, $V_D=1/2V_{DRM}$
$(dv/dt)_c$	Critical Rate of Rise of Off-State Voltage at Commutation	5.0			V/ μS	$T_j=125^\circ\text{C}$, $V_D=2/3V_{DRM}$ $(di/dt)_c= -0.75A/ms$
I_H	Holding Current		5.0		mA	
$R_{th(j-c)}$	Thermal Resistance			6.25	/W	Junction to case





PERFORMANCE CURVES

Fig 1. Gate Characteristics

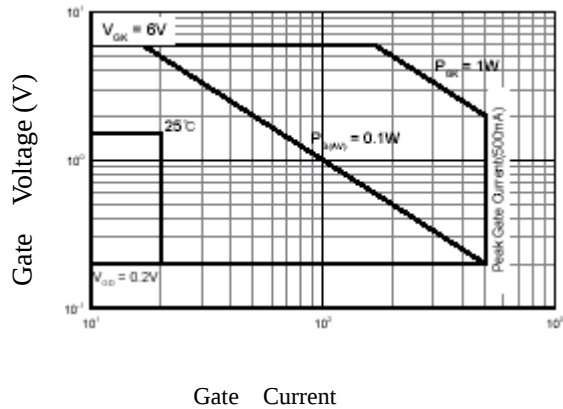


Fig 2. On-State Voltage

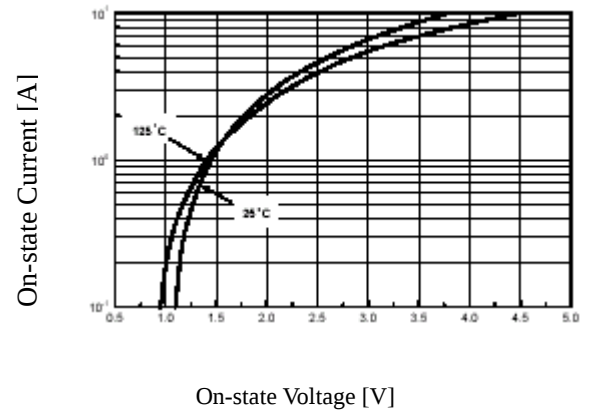


Fig 3. Gate Trigger Voltage vs. Junction Temperature

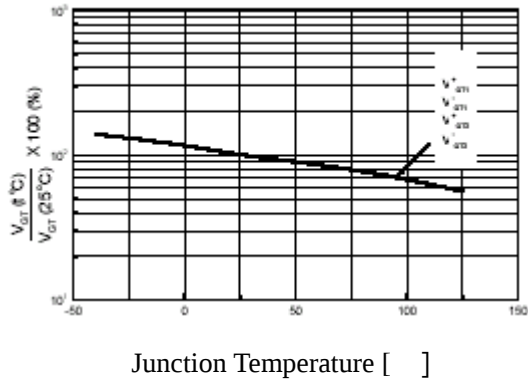


Fig 4. On State Current vs. Maximum Power Dissipation

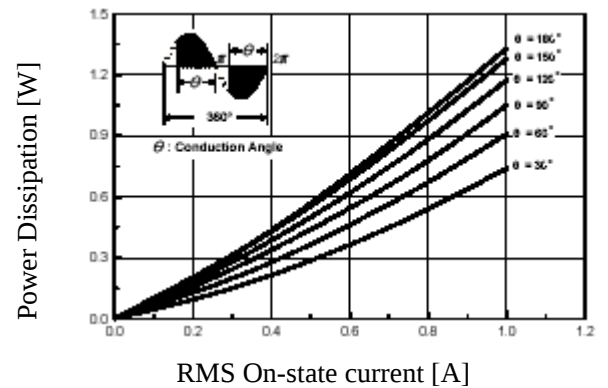


Fig 5. On State Current vs. Allowable Case Temperature

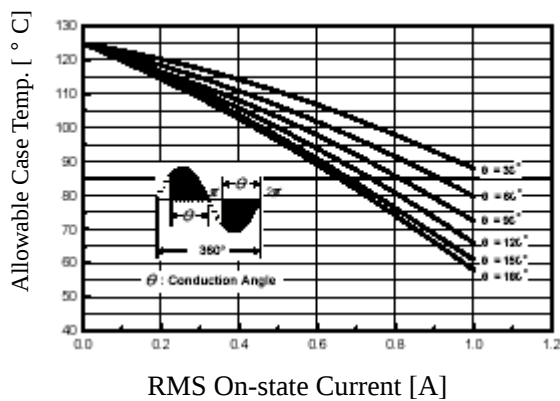
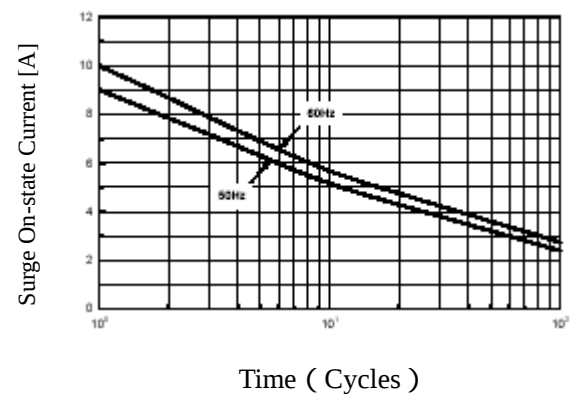


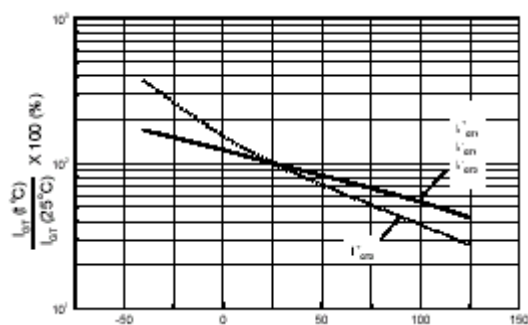
Fig 6. Surge On-State Current Rating (Non-Repetitive)





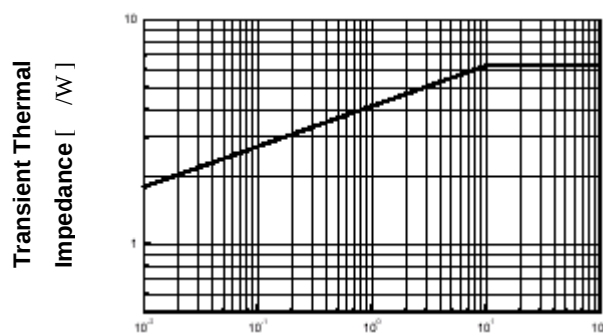
HTN2A60

Fig 7. Gate Trigger Current vs. Junction Temperature



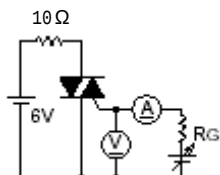
Junction Temperature []

Fig 8. Transient Thermal Impedance

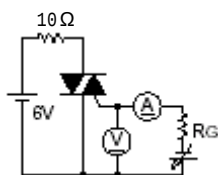


Time (sec)

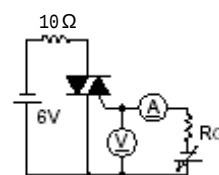
Fig 9. Gate Trigger Characteristics Test Circuit



Test Procedure



Test Procedure



Test Procedure