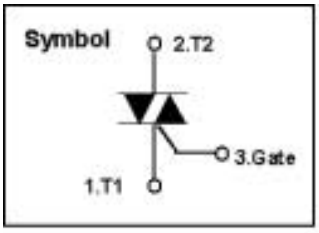
NON INSULATED TYPE TRIAC (TO-126 PACKAGE)



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℃)

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 (Ta=66℃) …… 1.5A

V_{GM}——Peak Gate Voltage…… 6.0V

I_{GM}——Peak Gate Current…… 0.5A

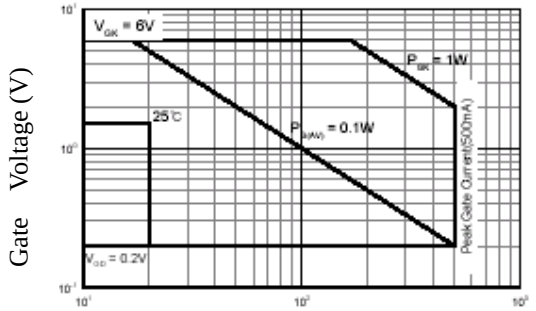
I_{TSM}——Surge On-state Current (One Cycle, 50/60Hz,Peak,Non-Repetitive)…… 13/15A

Electrical Characteristics (T_a=25℃)

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℃
V_{TM}	Peak On-State Voltage			1.6	V	I_T=2.1A, Inst. Measurement
$I+_{GT1}$	Gate Trigger Current (Ⅰ)			20	mA	V_D=6V, R_L=10 ohm
$I-_{GT1}$	Gate Trigger Current (Ⅱ)			20	mA	V_D=6V, R_L=10 ohm
$I-_{GT3}$	Gate Trigger Current (Ⅲ)			20	mA	V_D=6V, R_L=10 ohm
$V+_{GT1}$	Gate Trigger Voltage (Ⅰ)			1.5	V	V_D=6V, R_L=10 ohm
$V-_{GT1}$	Gate Trigger Voltage (Ⅱ)			1.5	V	V_D=6V, R_L=10 ohm
$V-_{GT3}$	Gate Trigger Voltage (Ⅲ)			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/μS	T_J=125℃,V_D=2/3V_{DRM} (di/dt)c= -0.75A/ms
I_H	Holding Current		5.0		mA	
Rth(j-c)	Thermal Resistance			6.25	℃/W	Junction to case

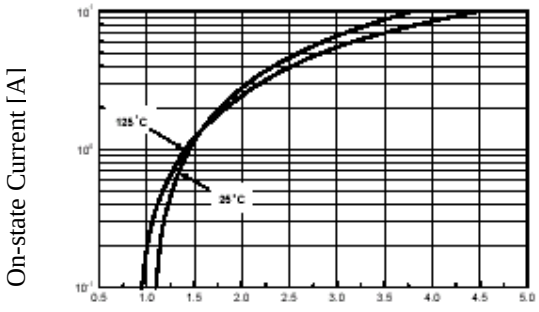
PERFORMANCE CURVES

Fig 1. Gate Characteristics



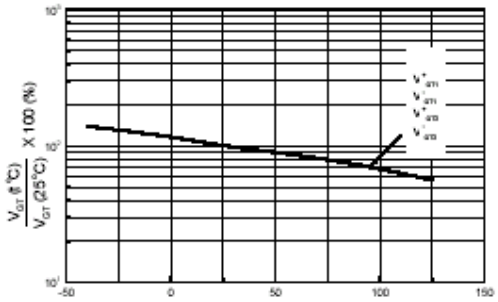
Gate Current

Fig 2. On-State Voltage



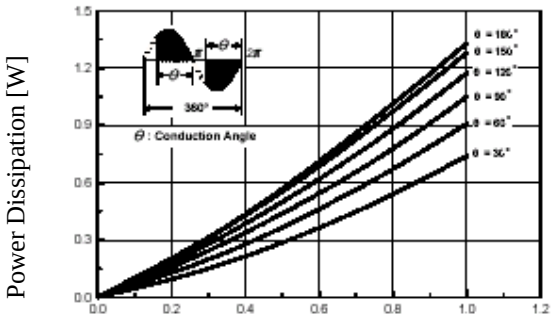
On-state Voltage [V]

Fig 3. Gate Trigger Voltage vs. Junction Temperature



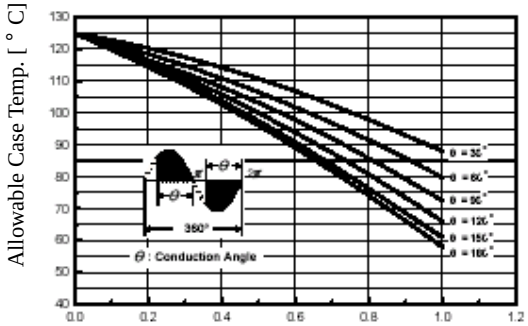
Junction Temperature [℃]

Fig 4. On State Current vs. Maximum Power Dissipation



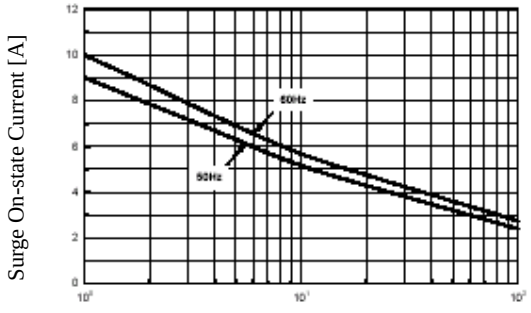
RMS On-state current [A]

Fig 5. On State Current vs. Allowable Case Temperature



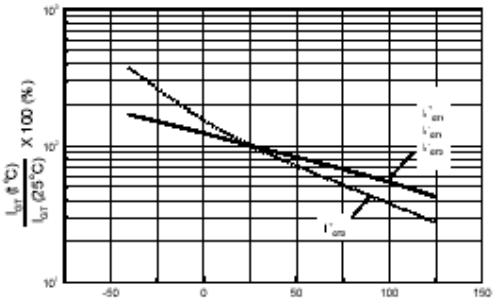
RMS On-state Current [A]

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



Time（Cycles）

Fig 7. Gate Trigger Current vs. Junction Temperature



Junction Temperature [℃]

Fig 8. Transient Thermal Impedance

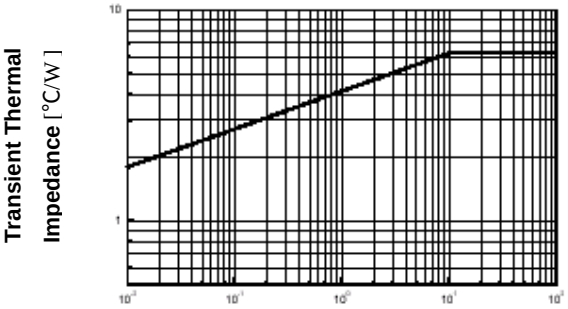
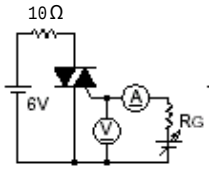
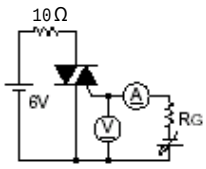


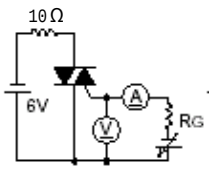
Fig 9. Gate Trigger Characteristics Test Circuit



Test Procedure Ⅰ



Test Procedure Ⅱ



Test Procedure Ⅲ