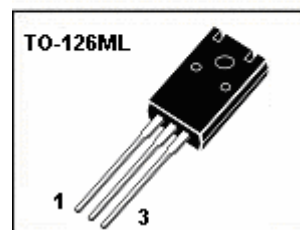
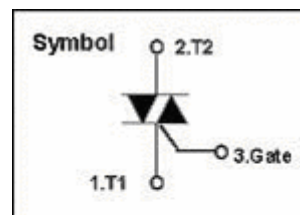


**NON INSULATED TYPE TRIAC (TO-126ML PACKAGE)****Features**

- \* 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 ( $T_a=66$ ) .....	1.5A
$V_{GM}$ —Peak Gate Voltage.....	6.0V
$I_{GM}$ —Peak Gate Current.....	0.5 A
$I_{TSM}$ —Surge On-state Current (One Cycle, 50/60Hz,Peak,Non-Repetitive).....	13/15A

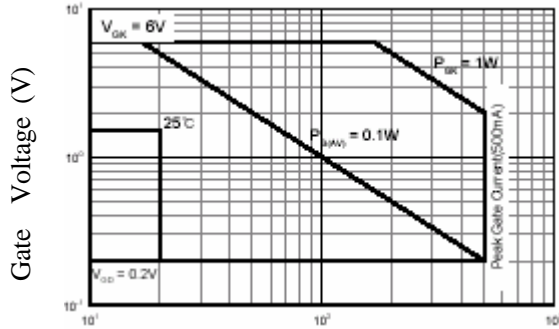
**Electrical Characteristics (  $T_a=25$  )**

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 ( )			20	mA	$V_D=6V$ , $R_L=10$ ohm
$I_{-GT1}$	Gate Trigger Current ( )			20	mA	$V_D=6V$ , $R_L=10$ ohm
$I_{-GT3}$	Gate Trigger Current ( )			20	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	$T_j=125$ , $V_D=1/2V_{DRM}$
( $dv/dt$ ) <sub>c</sub>	Critical Rate of Rise of Off-State Voltage at Commutation	5.0			V/ $\mu$ S	$T_j=125$ , $V_D=2/3V_{DRM}$ ( $di/dt$ ) <sub>c</sub> = -0.75A/ms
$I_H$	Holding Current		5.0		mA	
$R_{th(j-c)}$	Thermal Resistance			6.25	/W	Junction to case



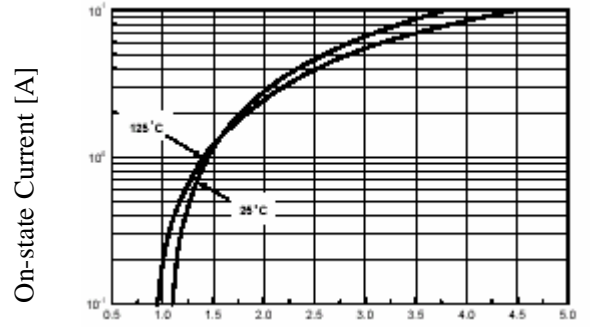
## PERFORMANCE CURVES

Fig 1. Gate Characteristics



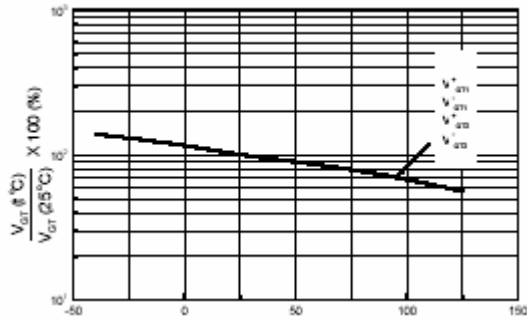
Gate Current

Fig 2. On-State Voltage



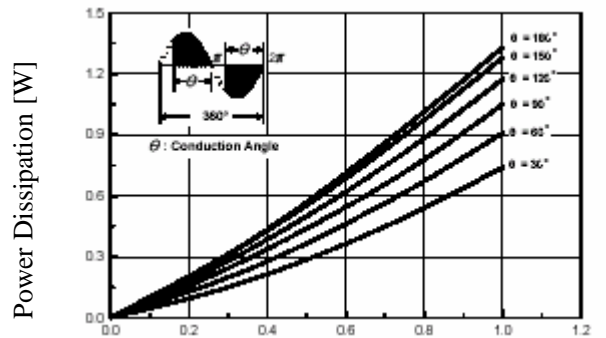
On-state Voltage [V]

Fig 3. Gate Trigger Voltage vs. Junction Temperature



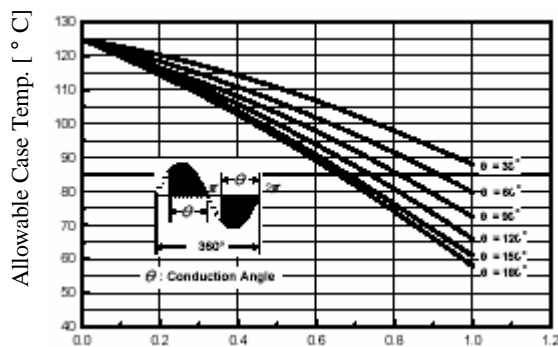
Junction Temperature [ °C ]

Fig 4. On State Current vs. Maximum Power Dissipation



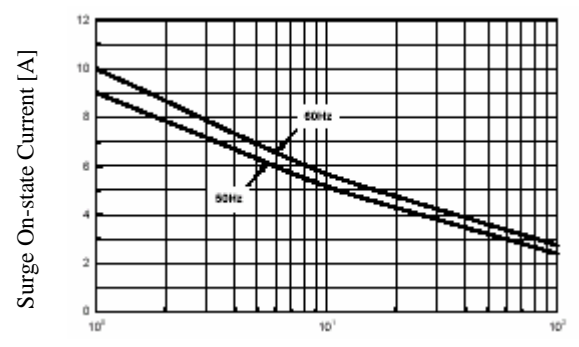
RMS On-state current [A]

Fig 5. On State Current vs. Allowable Case Temperature



RMS On-state Current [A]

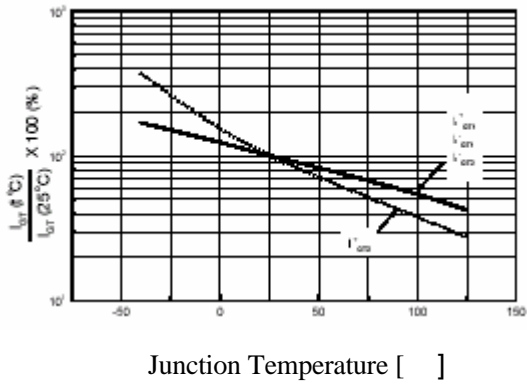
Fig 6. Surge On-State Current Rating ( Non-Repetitive )



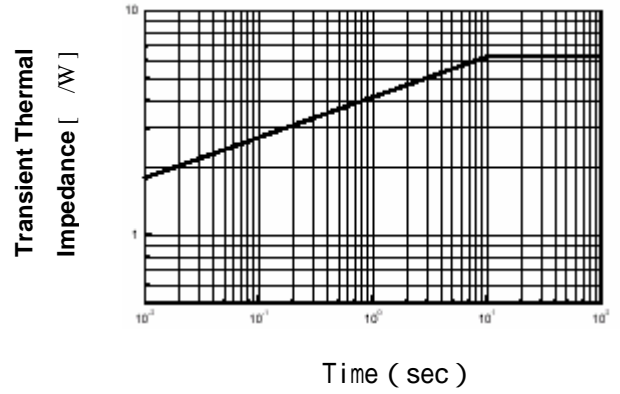
Time ( Cycles )



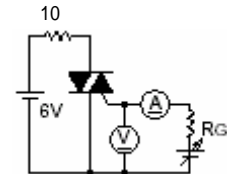
**Fig 7. Gate Trigger Current vs. Junction Temperature**



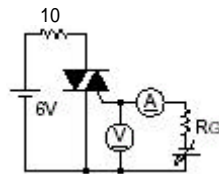
**Fig 8. Transient Thermal Impedance**



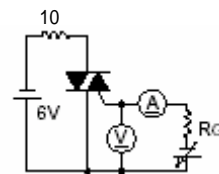
**Fig 9. Gate Trigger Characteristics Test Circuit**



Test Procedure



Test Procedure



Test Procedure