



T0610H-6F 6A TRIAC

Rev.A.1.1

DESCRIPTION:

The T0610H-6F triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. Compared to traditional triacs, T0610H-6F provides a very high switching capability up to junction temperatures of 150°C. It can be driven directly through the MCU I/O port. By using an external plastic package, T0610H-6F provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.

MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	6	A
V_{DRM}/V_{RRM}	600	V

$I_{GTn/D/\eta}$ 10/10/10 mA

Peak gate current ($t_p=20\mu s$, $T_j=150^\circ C$)	I_{GM}	4	A
Average gate power dissipation ($T_j=150^\circ C$)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25^\circ C$; non-repetitive, off-state; FIG. 7)	V_{pp}	3	kV

ELECTRICAL CHARACTERISTICS ($T_j=25^\circ C$ unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33\Omega$	$n-D-\eta$	MAX.	10	mA
V_{GT}		$n-D-\eta$	MAX.	1	V

ORDERING INFORMATION

T	06	10	H	-6	F
Triacs	$I_{T(RMS)}:6A$				F:TO-220F(Ins)
	$10:I_{GT1-3} \leq 10mA$			$6:V_{DRM} / V_{RRM} \leq 600V$	
			High junction temperature		

MARKING

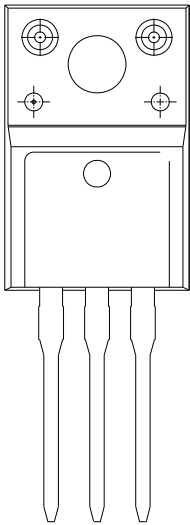


FIG.1: Maximum power dissipation versus RMS on-state current

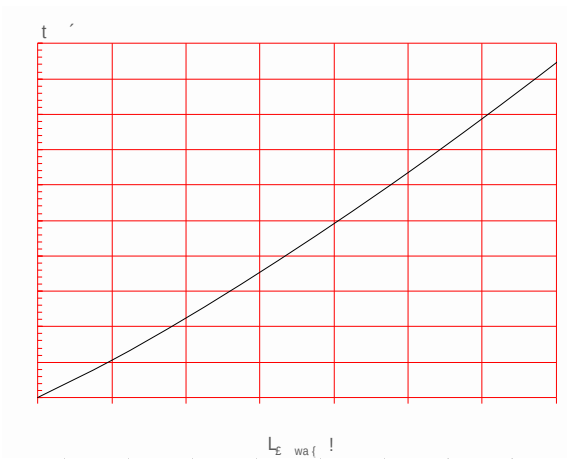


FIG.2: RMS on-state current versus case temperature

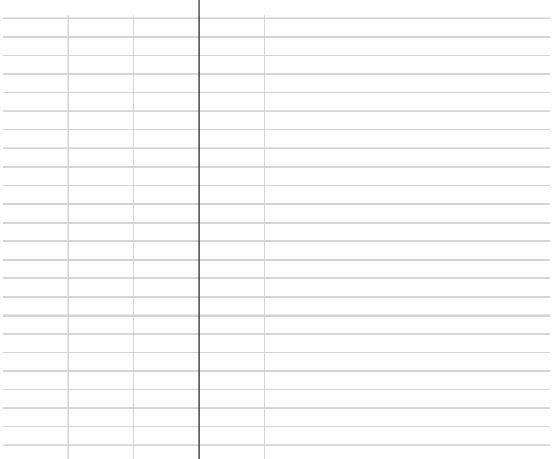
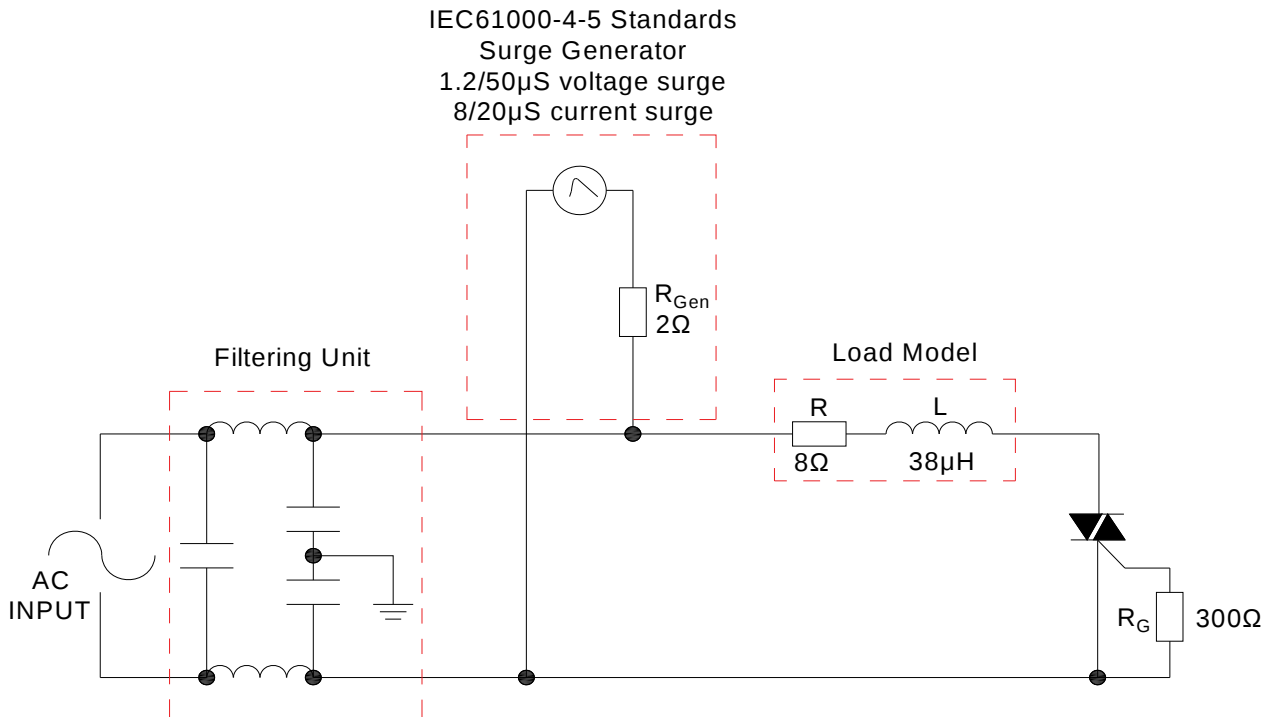


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



LEAD FORMING AND SOLDERING

Refer to the application note “Assembly Instructions for Thyristors in Through-hole Package” released by JieJie aΩ Œ o ũ Ş P Ş Œ ú o ũ Ω Œ Œ σ

ORDERING INFORMATION

Order code	Voltage V _{DRM} /V _{RRM} (V)	IGT(Ma)	! cV	Package	% ~	Vo _!&cr _ %ab ūd	+
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Information furnished in this document is believed to be accurate