

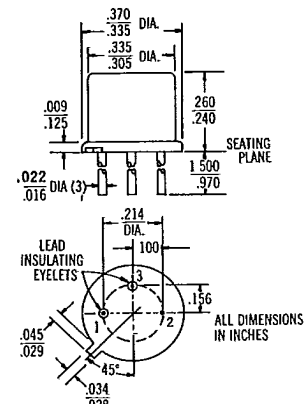
HUTSON INDUSTRIES**TRIAC's**

6 AMPERE TO-5 TRIAC

Advanced engineering and manufacturing technology at Hutson have produced highly reliable yet economical triacs for switching-device applications. Hutson triacs feature proprietary techniques that have proven advantages, which include an extremely dense, sodium-free proprietary glass to insure a positive hermetic seal, while eliminating the "punch-through" and "burn-through" associated with organic passivation materials.

Hutson triacs are bi-directional triode thyristors and may be switched from off-state to conduction for either polarity of applied voltage with positive or negative gate-trigger current. They are designed for control applications in lighting, heating, cooling and static switching relays.

In addition to standard package configurations, all Hutson triacs are also available in chip form. Please consult Hutson Industries for additional information.



INTERNAL CONNECTIONS:
TRIAC: 1. MAIN TERM. 1
2. MAIN TERM. 2
(CONNECTED TO CASE)
3. GATE

TO-5
(MODIFIED)
NOTE: MAIN TERM 2 AND CASE
ARE ELECTRICALLY COMMON.

HUTSON INDUSTRIES

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PRELIMINARY
DATA

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MAXIMUM RATINGS	SYMBOL	V_{LROM}	DEVICE NO.	UNIT
	Repetitive Peak Off-State Voltage, Gate Open, and $T_J = 100^\circ\text{C}$ V_{DROM}	50	HT06	VOLT
		100	HT16	
		200	HT26	
		300	HT36	
		400	HT46	
		500	HT56	
		600	HT66	
	RMS On-State Current at $T_c = 75^\circ\text{C}$ and Conduction Angle of 360°	$I_{T(RMS)}$	6	AMP
	Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60Hz	I_{TSM}	80	AMP
ELECTRICAL CHARACTERISTICS At Maximum Ratings and Specified Case Temperatures	Peak Gate-Trigger Current for $3\mu\text{sec}$, Max.	I_{GTM}	1	AMP
	Peak Gate-Power Dissipation at $I_{GT} \leq I_{GTM}$ for $3\mu\text{sec}$, Max.	P_{GM}	20	WATT
	Average Gate-Power Dissipation	$P_{G(AV)}$.2	WATT
	Storage Temperature Range	T_{stg}	-40 to +150	$^\circ\text{C}$
	Operating Temperature Range, T_c	T_{oper}	-40 to +100	$^\circ\text{C}$
	Peak Off-State Current, Gate Open, ⁽²⁾ $T_J = 100^\circ\text{C}$ $V_{DROM} = \text{Max. Rating}$	I_{DROM}	2 Max.	mA
	Maximum On-State Voltage at $T_c = 25^\circ\text{C}$ and $I_T = 10$ Amp (Peak)	V_{TM}	2.2 Max.	VOLT
	DC Holding Current, Gate Open and $T_c = 25^\circ\text{C}$	I_{HO}	50 Max.	mA
	Critical Rate-of-Rise of Off-State Voltage ⁽²⁾ for $V_D = V_{DROM}$, Gate Open, $T_c = 100^\circ\text{C}$	Critical dv/dt	5 Typ.	$\text{V}/\mu\text{sec.}$
	DC Gate-Trigger Current for $V_D = 6\text{VDC}$, $R_L = 39\Omega$ and at $T_c = 25^\circ\text{C}$ ($T_1 + \text{Gate} +$, $T_2 - \text{Gate} -$) Quads I and III ($T_1 + \text{Gate} -$, $T_2 - \text{Gate} +$) Quads II and IV (Note 1)	I_{GT}	50 Max. 80 Max.	mA
	DC Gate-Trigger Voltage for $V_D = 6\text{VDC}$, $R_L = 39\Omega$ and at $T_c = 25^\circ\text{C}$	V_{GT}	2.5 Typ.	VOLT
	Gate-Controlled Turn-on Time for $V_D = V_{DROM}$, $I_{GT} = 80\text{mA}$, $t_1 = 0.1\mu\text{sec.}$, $I_T = 10\text{A}$ (Peak) and $T_c = 25^\circ\text{C}$	t_{gt}	2.5 Typ.	$\mu\text{sec.}$
	Thermal Resistance, Junction-to-Case	θ_{J-C}	3 Typ.	$^\circ\text{C}/\text{W}$

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