

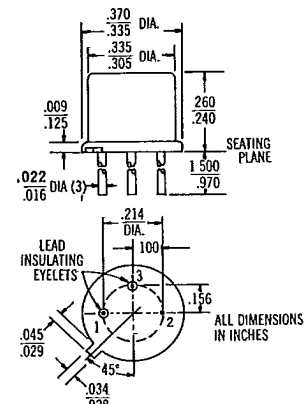
HUTSON INDUSTRIES**TRIAC's**

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

2019 W. VALLEY VIEW LANE
DALLAS, TEXAS 75234 (214) 241-3511
TWX 910-860-5537



PRELIMINARY
DATA

HT--00006-1X

MARCH 1977/HDT 102

HUTSON INDUSTRIES

6 Ampere TO-5 TRIAC

PRELIMINARY DATA

MAXIMUM RATINGS	SYMBOL	V_{DRM}	DEVICE NO.	UNIT
	Repetitive Peak Off-State Voltage, Gate Open, and $T_J = 100^\circ\text{C}$ V_{DRM}	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
	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	$^\circ\text{C}$
ELECTRICAL CHARACTERISTICS At Maximum Ratings and Specified Case Temperatures	Peak Off-State Current, Gate Open, ⁽²⁾ $T_J = 100^\circ\text{C}$ $V_{DRM} = \text{Max. Rating}$ I_{DROM}		2 Max.	mA
	Maximum On-State Voltage at $T_c = 25^\circ\text{C}$ and $I_r = 10$ 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 $V_D = V_{DRM}$, Gate Open, $T_c = 100^\circ\text{C}$ Critical dv/dt		5 Typ.	V/ μsec .
	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 $V_D = V_{DRM}$, $I_{GT} = 80\text{mA}$, $t_1 = 0.1\mu\text{sec}$, $I_r = 10\text{A}$ (Peak) and $T_c = 25^\circ\text{C}$ t_{gt}		2.5 Typ.	μsec .
	Thermal Resistance, Junction-to-Case θ_{J-C}		3 Typ.	$^\circ\text{C/W}$

Hutson Industries, Inc. reserves the right to make changes in specifications at any time and without notice to improve design and/or performance of their products.

The information furnished by Hutson in this publication is believed to be accurate and reliable. However, no responsibility is assumed by Hutson for its use; nor for any infringements of patents or other rights of third parties resulting from its use. No license either expressed or implied is granted under any patents or patent rights of Hutson Industries, Inc.

PRINTED IN USA



HUTSON INDUSTRIES

BOX 34235 • 2019 W. VALLEY VIEW LANE
DALLAS, TEXAS 75234 • (214) 241-3511
WX 910-860-5537

HT--- 00006-2X.