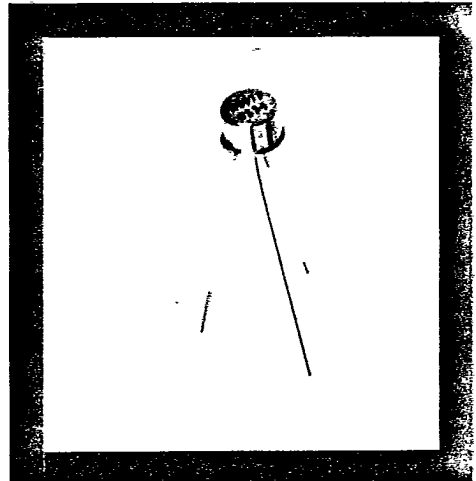


# HUTSON INDUSTRIES

# TRIAC's



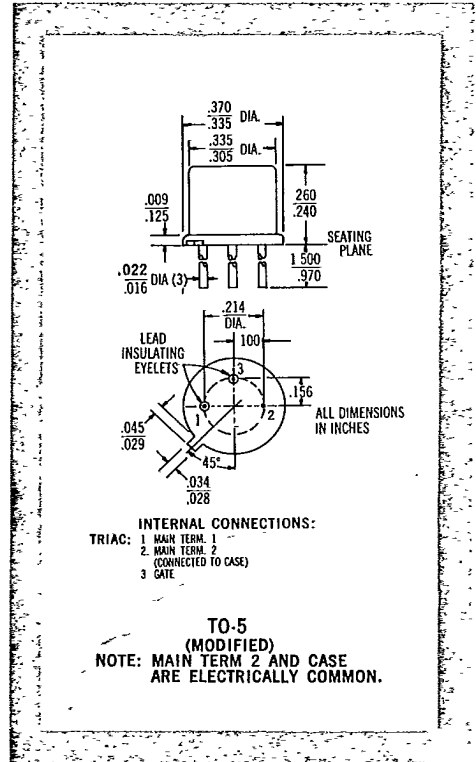
## 6 AMPERE TO-5 TRIAC



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.



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



PRELIMINARY  
 DATA

HT--00006-1X

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**6 Ampere TO-5 TRIAC**

PRELIMINARY DATA

	SYMBOL	V <sub>DRM</sub>	DEVICE NO.	UNIT	
					MAXIMUM RATINGS
MAXIMUM RATINGS	Repetitive Peak Off-State Voltage, Gate Open, and T <sub>J</sub> = 100°C	V <sub>DRM</sub>	50	HT06	VOLT
			100	HT16	
			200	HT26	
			300	HT36	
			400	HT46	
			500	HT56	
			600	HT66	
	RMS On-State Current at T <sub>c</sub> = 75°C and Conduction Angle of 360°	I <sub>T(RMS)</sub>		6	AMP
Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60Hz	I <sub>TSM</sub>		80	AMP	
Peak Gate-Trigger Current for 3μsec, Max.	I <sub>GTM</sub>		1	AMP	
Peak Gate-Power Dissipation at I <sub>GT</sub> ≤ I <sub>GTM</sub> for 3μsec, Max.	P <sub>GM</sub>		20	WATT	
Average Gate-Power Dissipation	P <sub>G(AV)</sub>		.2	WATT	
Storage Temperature Range	T <sub>stg</sub>		-40 to +150	°C	
Operating Temperature Range, T <sub>c</sub>	T <sub>oper</sub>		-40 to +100	°C	
ELECTRICAL CHARACTERISTICS At Maximum Ratings and Specified Case Temperatures	Peak Off-State Current, Gate Open, <sup>(2)</sup> T <sub>J</sub> = 100°C V <sub>DRM</sub> = Max. Rating	I <sub>DRM</sub>		2 Max.	mA
	Maximum On-State Voltage at T <sub>c</sub> = 25°C and I <sub>T</sub> = 10 Amp (Peak)	V <sub>TM</sub>		2.2 Max.	VOLT
	DC Holding Current, Gate Open and T <sub>c</sub> = 25°C	I <sub>HO</sub>		50 Max.	mA
	Critical Rate-of-Rise of Off-State Voltage <sup>(2)</sup> for V <sub>D</sub> = V <sub>DRM</sub> , Gate Open, T <sub>c</sub> = 100°C	Critical dv/dt		5 Typ.	V/μsec.
	DC Gate-Trigger Current for V <sub>D</sub> = 6VDC, R <sub>L</sub> = 39Ω and at T <sub>c</sub> = 25°C (T <sub>2</sub> +Gate+, T <sub>2</sub> -Gate-) Quads I and III (T <sub>2</sub> +Gate-, T <sub>2</sub> -Gate+) Quads II and IV (Note 1)	I <sub>GT</sub>		50 Max. 80 Max.	mA
	DC Gate-Trigger Voltage for V <sub>D</sub> = 6VDC, R <sub>L</sub> = 39Ω and at T <sub>c</sub> = 25°C	V <sub>GT</sub>		2.5 Typ.	VOLT
	Gate-Controlled Turn-on Time for V <sub>D</sub> = V <sub>DRM</sub> , I <sub>GT</sub> = 80mA, t <sub>r</sub> = 0.1μsec., I <sub>T</sub> = 10A (Peak) and T <sub>c</sub> = 25°C	t <sub>gt</sub>		2.5 Typ.	μsec.
	Thermal Resistance, Junction-to-Case	θ <sub>J-C</sub>		3 Typ.	°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.

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

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