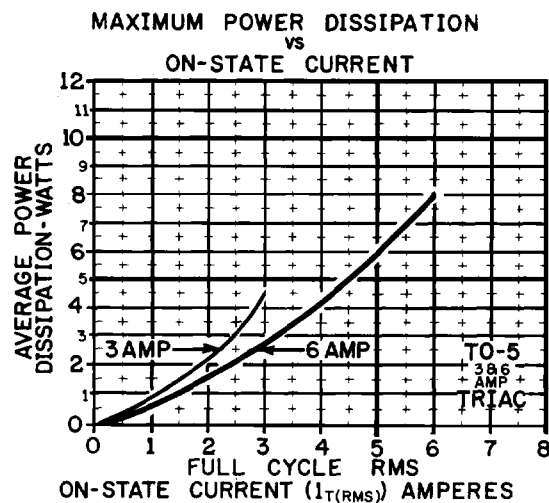


TO-5 SENSITIVE AND NONSENSITIVE GATE TRIAC

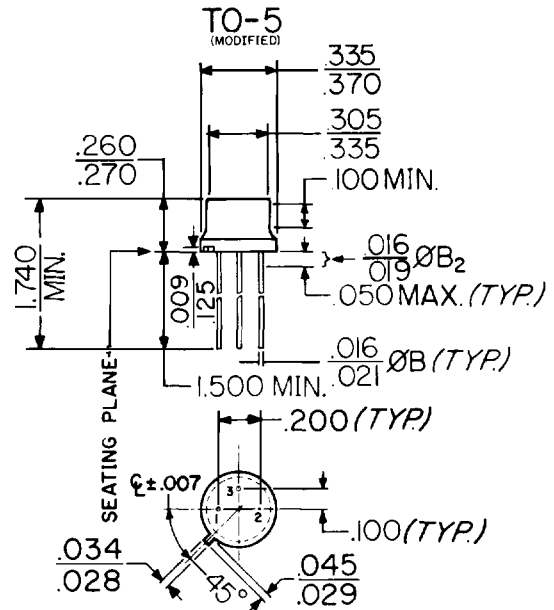
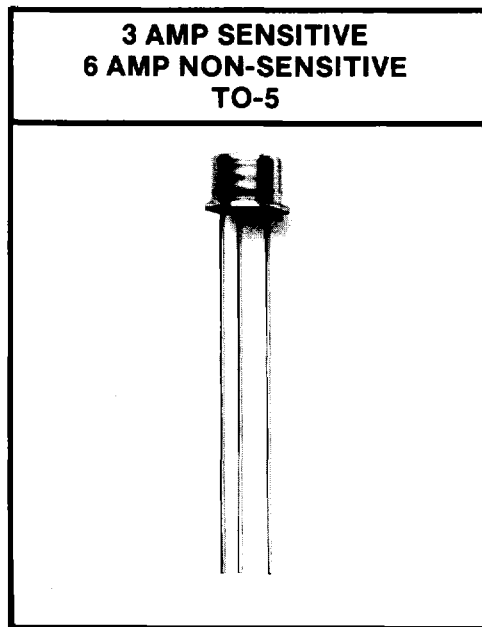
MAXIMUM RATINGS	SYMBOL	V _{DRM}	DEVICE NUMBERS					UNITS
Repetitive Peak Off-State Voltage (1) Gate Open, and T _J = 110° C	V _{DRM}	200 400 600	HI23SS HI43SS HI63SS	HI23SD HI43SD HI63SD	HI23SG HI43SG HI63SG	HI23SH HI43SH HI63SH	HT26 HT46 HT66	VOLT
RMS On-State Current at T _C = 80°C and Conduction Angle of 360°	I _{T(RMS)}		3.0	3.0	3.0	3.0	6.0	AMP
Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60Hz	I _{TSM}		30	30	30	30	80	AMP
Peak Gate-Trigger Current for 3μsec. Max.	I _{GTM}		1	1	1	1	1	AMP
Peak Gate-Power Dissipation at I _{GT} ≤ I _{GTM}	P _{GM}		20	20	20	20	20	WATT
Average Gate-Power Dissipation	P _{G(AV)}		0.2	0.2	0.2	0.2	0.2	WATT
Storage Temperature Range	T _{stg}		-40 to +150					°C
Operating Temperature Range, T _J	T _{oper}		-40 to +110					°C
ELECTRICAL CHARACTERISTICS At Specified Case Temperatures								
Peak Off-State Current, (1) Gate Open T _C = 110°C V _{DRM} = Max. Rating	I _{DRM}		0.75	0.75	0.75	0.75	1.0	mA MAX
Maximum On-State Voltage, (1) at T _C = 25°C and I _T = Rated Amps	V _{TM}		1.85	2.20	2.20	2.20	2.20	VOLT MAX
DC Holding Current, (1) Gate Open and T _C = 25°C	I _{HO}		5	15	15	15	50	mA MAX
Critical Rate-Of-Rise of Off-State Voltage, (1) for V _D = V _{DRM} Gate Open, T _C = 110°C	Critical dv/dt		3	4	5	7	5	V/μsec.
Critical Rate-Of-Rise of Commutation Voltage, (1) at T _C = 80°C, Gate Unenergized, V _D = V _{DRM} I _T = I _{T(RMS)}	Commutating dv/dt		1	1	1	1	3	V/μsec.
DC Gate-Trigger Current for V _D = 12VDC, R _L = 60Ω and at T _C = 25°C (T ₂ ⁺ Gate +, T ₂ ⁻ Gate-) Quads I and III (T ₂ ⁺ Gate -, T ₂ ⁻ Gate+) Quads II and IV	I _{GT}		3	5	10	25	50 I, III 80 II, IV	mA MAX
DC Gate-Trigger Voltage for V _D = 12VDC, R _L = 60Ω and at T _C = 25°C	V _{GT}		2.2	2.2	2.2	2.2	2.5	VOLT MAX
Gate-Controlled Turn-on Time for V _D = V _{DRM} ; I _{GT} = 80mA I _R = 0.1 μsec., I _T = 6A (Peak) and T _C = 25°C	T _{gt}		2.2	2.2	2.2	2.2	2.5	μsec.
Thermal Resistance, Junction-to-Case	RθJ-C		4	4	4	4	3	°C/WATT TYP

*Notes:

(1) All Values Apply in either direction



HUTSON INDUSTRIES TRIAC'S



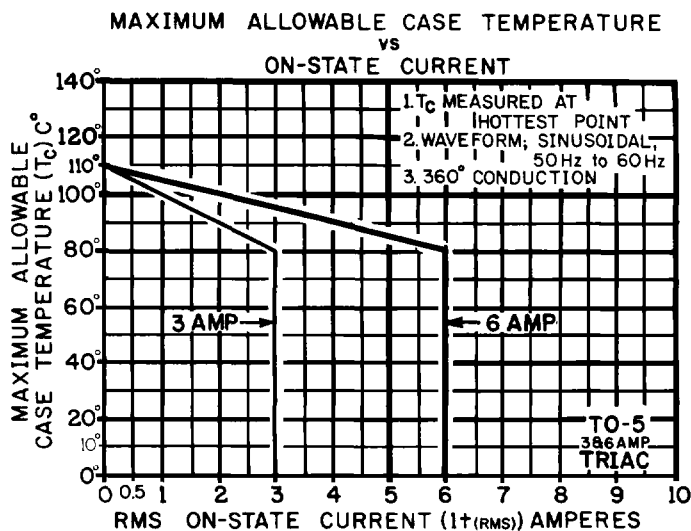
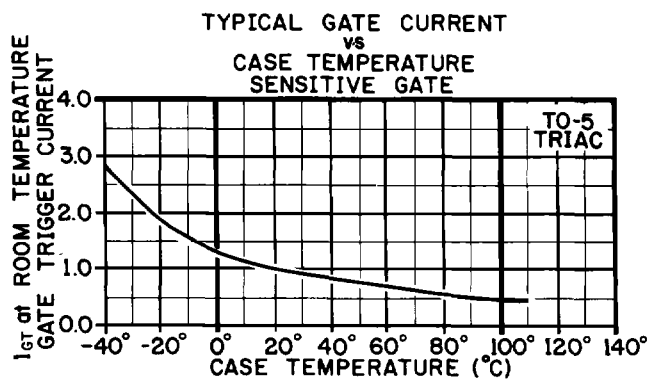
ALL DIMENSIONS IN INCHES

INTERNAL CONNECTIONS

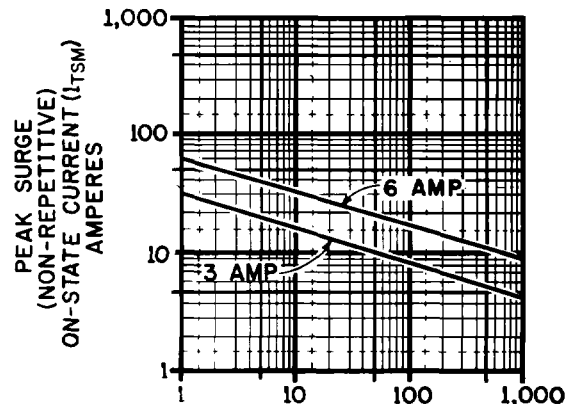
---TRIAC---

1. MAIN TERMINAL 1
2. MAIN TERMINAL 2
(Connected To Case)
3. GATE

NOTE: Main Terminal 2 and Case are
Electronically Common



PEAK SURGE ON-STATE CURRENT vs. SURGE CURRENT DURATION



SURGE CURRENT DURATION, FULL CYCLES at 60Hz

CURRENT WAVEFORM:

SINUSOIDAL, 60 Hz

RESISTIVE LOAD

$I_{tr(RMS)}$ = RATED AMPS at 80 T_c

GATE CONTROL MAY BE

LOST DURING AND AFTER

SURGE.

GATE CONTROL WILL BE

REGAINED AFTER T_j RETURNS

TO STEADY-STATE VALUE.

**TO-5
TRIAC**

3 and 6 Amperes