

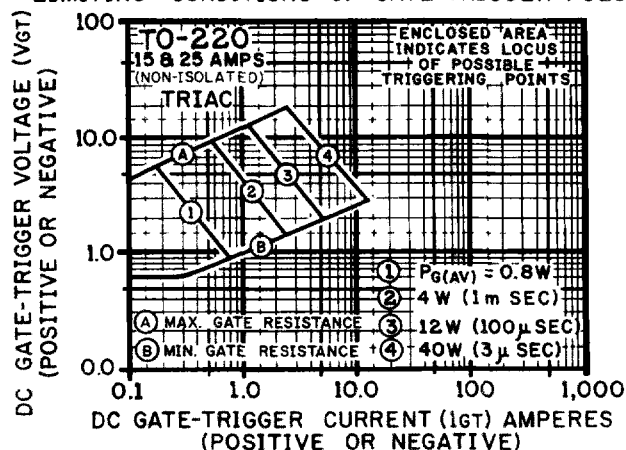
TO-220 NONISOLATED TRIAC

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	NT215 NT415 NT615	NT225 NT425 NT625	VOLT
RMS On-State Current at T _C = 80°C and Conduction Angle of 360°	I _{T(RMS)}		15.0	25.0	AMP
Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60Hz	I _{TSM}		150	250	AMP
Peak Gate-Trigger Current for 3μsec. Max.	I _{GTM}		2.0	2.0	AMP
Peak Gate-Power Dissipation at I _{GT} ≤ I _{GTM}	P _{GM}		20	20	WATT
Average Gate-Power Dissipation	P _{G(AV)}		0.5	0.5	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 Temperature					
Peak Off-State Current, (1) Gate Open T _C = 110°C V _{DRM} = Max. Rating	I _{DRM}		0.5	0.5	mA MAX
Maximum On-State Voltage, (1) at T _C = 25°C and I _T = Rated Amps	V _{TM}		1.6	1.6	VOLT MAX
DC Holding Current, (1) Gate Open and T _C = 25°C	I _{HQ}		70	70	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		20	200	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)}	Critical dv/dt		5	5	V/μsec.
DC Gate-Trigger Current for V _D = 12VDC, R _L = 30Ω 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}		50 I, III 80 II, IV	50 I, III 80 II, IV	mA MAX
DC Gate-Trigger Voltage for V _D = 12VDC, R _L = 30Ω and at T _C = 25°C	V _{GT}		2.5	2.5	VOLT MAX
Gate-Controlled Turn-on Time for V _D = V _{DRM} , I _{GT} = 200mA t _R = 0.1 μsec., I _T = 10A (Peak) and T _C = 25°C	T _{gt}		3	3	μsec.
Thermal Resistance, Junction-to-Case	RθJ-C		1.3	1.3	°C/WATT TYP

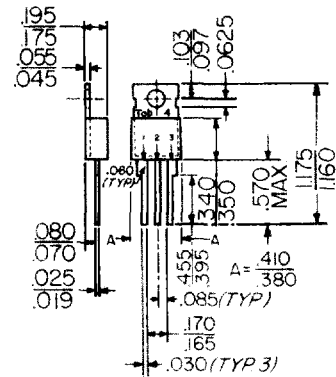
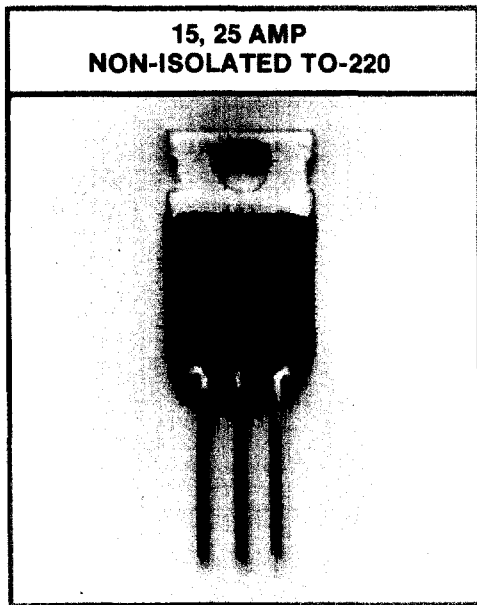
*Notes:

(1) All Values Apply in either direction

GATE TRIGGER CHARACTERISTICS AND LIMITING CONDITIONS OF GATE-TRIGGER PULSES



HUTSON INDUSTRIES TRIAC'S



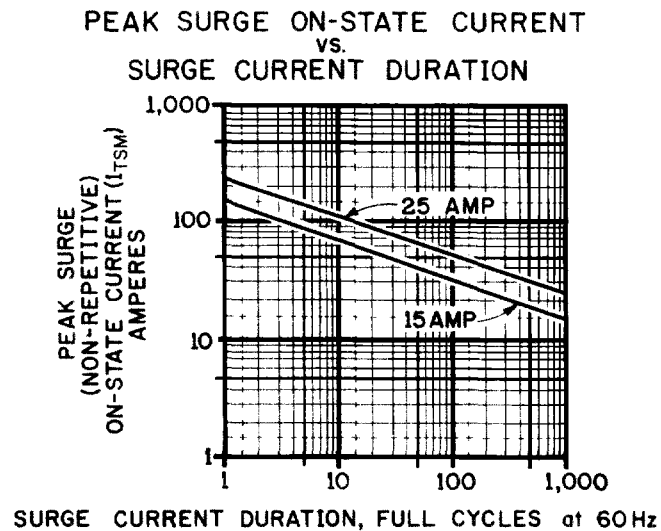
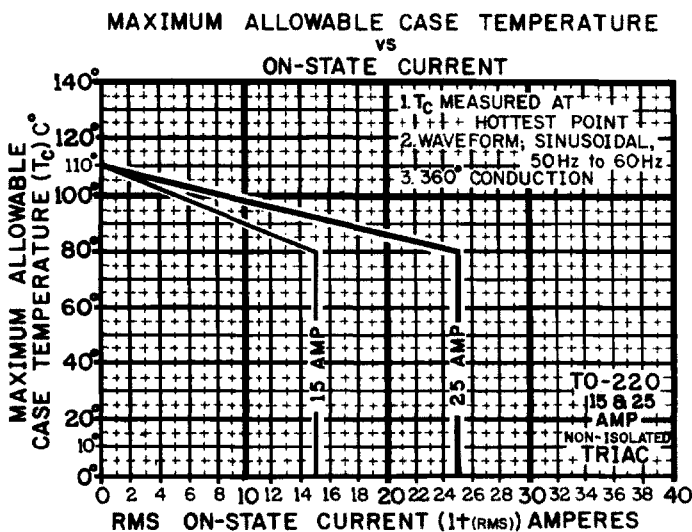
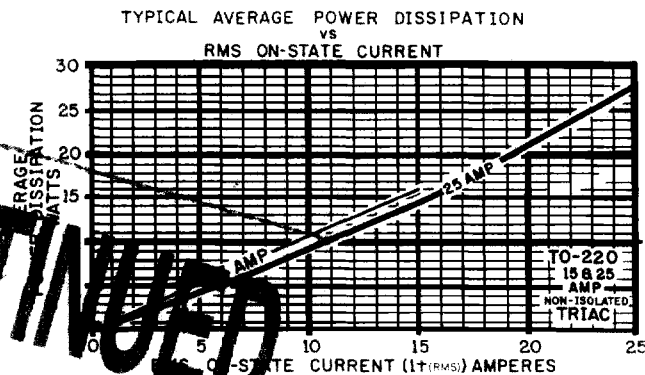
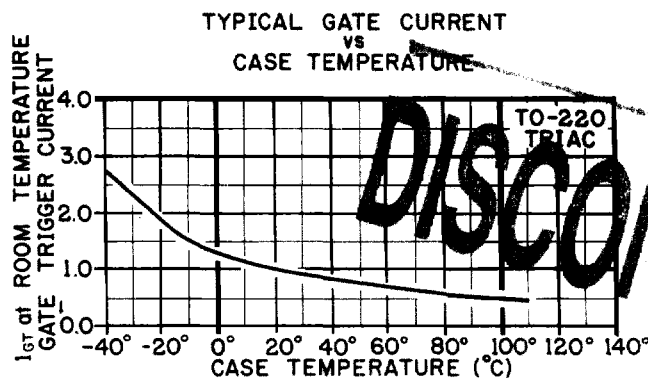
TO-220

ALL DIMENSIONS IN INCHES

INTERNAL CONNECTIONS

---NON-ISOLATED TRIAC---

1. Main Terminal 1
2. Main Terminal 2
3. Gate
4. Tab Common to Terminal 2



CURRENT WAVEFORM:
 SINUSOIDAL, 60 Hz
 RESISTIVE LOAD
 I_{T(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.