

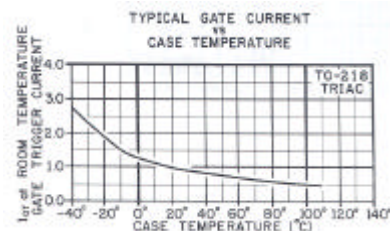
HUTSON INDUSTRIES, INC.

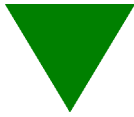
TO-218 ISOLATED AND NONISOLATED TRIAC

MAXIMUM RATINGS	SYMBOL	VDRM	DEVICE NUMBERS			UNITS
Repetitive Peak Off-State Voltage (1) Gate Open, and T _J = 110° C	VDRM		ISOLATED			VOLT
		200	HIT216	HIT225	HIT240	
		400	HIT416	HIT425	HIT440	
		600	HIT616	HIT625	HIT640	
			NONISOLATED			
		200	HNT216	HNT225	HNT240	
		400	HNT416	HNT425	HNT440	
		600	HNT616	HNT625	HNT640	
RMS On-State Current at T _c = 80° C and Conduction Angle of 360°	I _t (RMS)		16.0	25.0	40.0	AMP
Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60 Hz	ITSM		160	250	400	AMP
Peak Gate-Trigger Current for 3μsec. Max.	IGTM		4	4	4	AMP
Peak Gate-Power Dissipation at IGT ≤ IGTM	PGM		40	40	40	WATT
Average Gate-Power Dissipation	PG(AV)		0.8	0.8	0.8	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 TC = 110° C VDRM = Max. Rating	IDRM		0.5	0.5	0.5	mA MAX.
Maximum On-State Voltage, (1) at T _c =25°C and I _T = Rated Amps	V _{TM}		1.8	1.8	1.8	VOLT MAX
DC Holding Current, (1) Gate Open and TC = 25°C	I _{HO}		100	100	100	mA MAX.
Critical Rate-Of-Rise of Off-State Voltage, (1) for V _D = VDRM Gate Open, TC = 110°C	Critical dv/dt		200	200	200	V/μsec.
Critical Rate-Of-Rise Of Communication Voltage, (1) at TC = 80° C, Gate Unenergized, V _D = VDRM, I _T = I _T (RMS)	Commutating dv/dt		5	5	5	V/μsec.
DC Gate - Trigger Current for V _D = 12VDC, R _L = 60 OHM and at TC = 25° C (T ₂ + GATE + T ₂ - GATE-) Quads 1 & 3 (T ₂ + GATE - T ₂ - GATE +) Quads 2 & 4	IGTM		100 I, II,III 150 IV	100 I, II,III 150 IV	100 I, II,III 150 IV	mA MAX.
DC Gate-Trigger Voltage for V _D = 12VDC, R _L = 30 OHM and at TC = 25°C	VGT		2.5	2.5	2.5	VOLT MAX
Gate-Controlled Turn-on Time for V _D =VDRM, IGT = 200mA t _R =0.1 μsec., I _T = 10A (Peak) and TC = 25°C	T _{gt}		3	3	3	μsec.
Thermal Resistance, Junction-to-Case ISOLATED	R _{qJ-C}		1.4	1.1	0.95	°C/WATT TYP
Thermal Resistance, Junction-to-Case NONISOLATED	R _{qJ-C}		(1.2)	(1.0)	(0.91)	°C/WATT TYP

Notes:

- (1) All Values Apply in either direction
- *All Hutson Isolated TO-218 devices are UL recognized. UL Number E95589 (N)



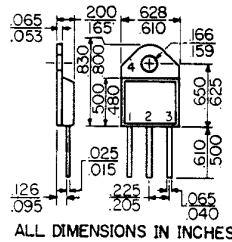


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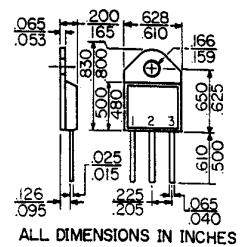


NON-ISOLATED TO-218

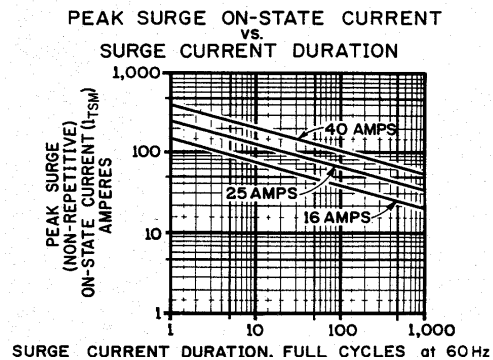
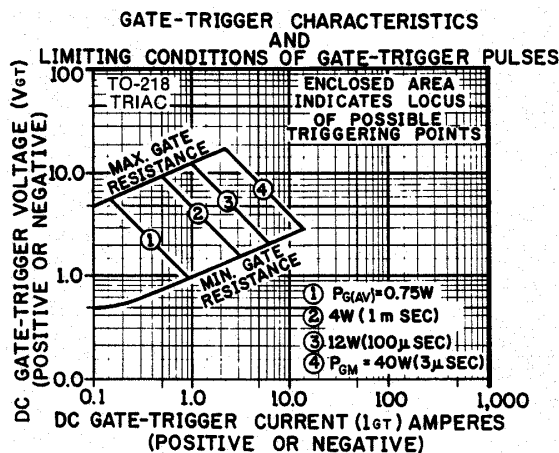
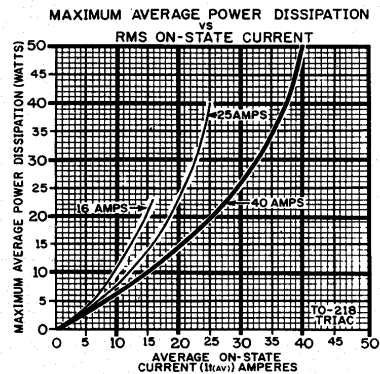
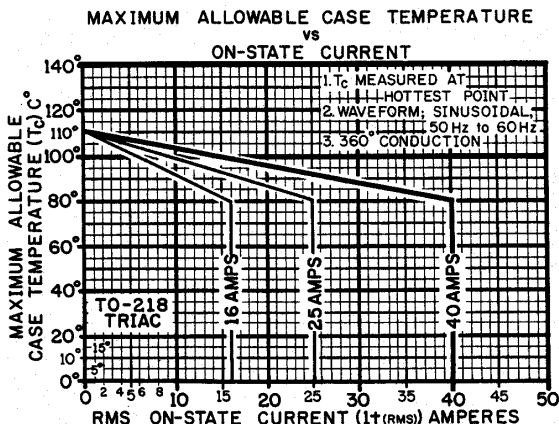


1. MT 1
2. MT 2
3. GATE
4. Common with Terminal 2

ISOLATED TO-218



1. MT 1
2. MT 2
3. GATE



CURRENT WAVEFORM:
SINUSOIDAL, 60Hz

RESISTIVE LOAD

$I_{tr(RMS)}$ = RATED AMPS at 80° Tc

GATE CONTROL MAY BE LOST DURING AND AFTER SURGE. GATE CONTROL WILL BE REGAINED AFTER Tj RETURNS TO STEADY STATE VALUE.