

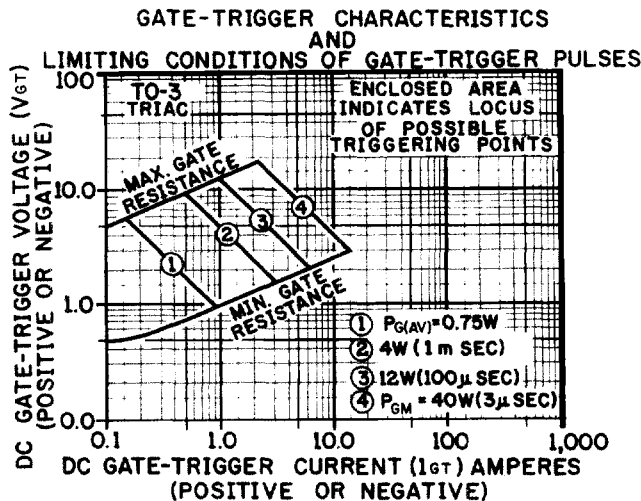
TO-3 (PLASTIC) TRIAC

MAXIMUM RATINGS	SYMBOL	V_{DRM}	DEVICE NUMBERS			UNITS
Repetitive Peak Off-State Voltage (1) Gate Open, and $T_J = 110^\circ\text{C}$	V_{DRM}	200 400 600	3TB25 3TD25 3TM25	3TB40 3TD40 3TM40	3TB60 3TD60 3TM60	VOLT
RMS On-State Current at $T_C = 80^\circ\text{C}$ and Conduction Angle of 360°	$I_{T(RMS)}$		25	40	60	AMP
Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60Hz	I_{TSM}		250	400	600	AMP
Peak Gate-Trigger Current for $3\mu\text{sec}$. Max.	I_{GTM}		4	4	4	AMP
Peak Gate-Power Dissipation at $I_{GT} \leq I_{GTM}$	P_{GM}		40	40	40	WATT
Average Gate-Power Dissipation	$P_{G(AV)}$		0.8	0.8	0.8	WATT
Storage Temperature Range	T_{stg}		-40 to +150			$^\circ\text{C}$
Operating Temperature Range, T_J	T_{oper}		-40 to +110			$^\circ\text{C}$
ELECTRICAL CHARACTERISTICS At Specified Case Temperatures						
Peak Off-State Current, (1) Gate Open $T_C = 110^\circ\text{C}$ $V_{DRM} = \text{Max. Rating}$	I_{DRM}		1.0	2.0	2.0	mA MAX
Maximum On-State Voltage, (1) at $T_C = 25^\circ\text{C}$ and $I_T = \text{Rated Amps}$	V_{TM}		1.8	2.0	2.2	VOLT MAX
DC Holding Current, (1) Gate Open and $T_C = 25^\circ\text{C}$	I_{HO}		80	100	150	mA MAX
Critical Rate-Of-Rise of Off-State Voltage, (1) for $V_D = V_{DRM}$ Gate Open, $T_C = 110^\circ\text{C}$	Critical dv/dt		200	200	200	V/ μsec
Critical Rate-Of-Rise of Commutation Voltage, (1) at $T_C = 80^\circ\text{C}$, Gate Unenergized, $V_D = V_{DRM}$ $I_T = I_{T(RMS)}$	Commutat dv/dt			5	5	V/ μsec .
DC Gate-Trigger Current for $V_D = 12\text{VDC}$, $R_L = 30\Omega$ and at $T_C = 25^\circ\text{C}$ (T_2^+ Gate +, T_2^- Gate-) Quads I and III (T_2^+ Gate -, T_2^- Gate+) Quads II and IV	I_{GT}		100 I, III 150 II, IV	100 I, III 150 II, IV	100 I, III 150 II, IV	mA MAX
DC Gate-Trigger Voltage for $V_D = 12\text{VDC}$, $R_L = 30\Omega$ and at $T_C = 25^\circ\text{C}$	V_{GT}		2.5	2.5	2.5	VOLT MAX
Gate-Controlled Turn-on Time for $V_D = V_{DRM}$ $I_{GT} = 200\text{mA}$ $t_R = 0.1 \mu\text{sec.}$ $I_T = 10\text{A (Peak)}$ and $T_C = 25^\circ\text{C}$	T_{gt}		3	3	3	$\mu\text{sec.}$
Thermal Resistance, Junction-to-Case	$R_{\theta J-C}$		1.3	1.3	1.3	$^\circ\text{C/WATT}$ TYP

DISCONTINUED

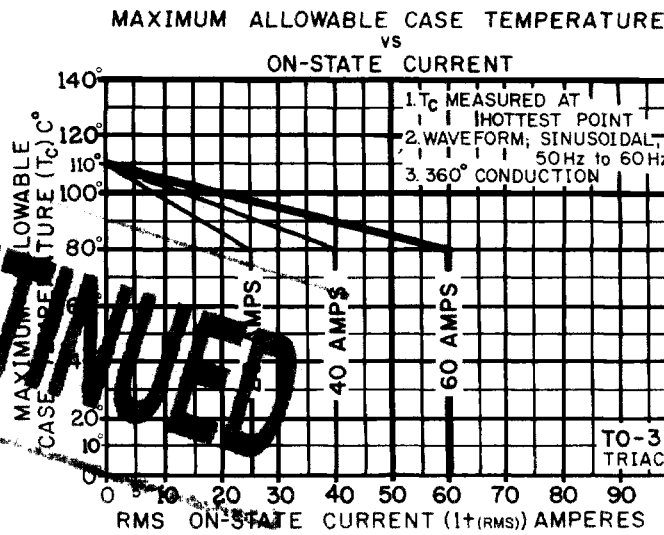
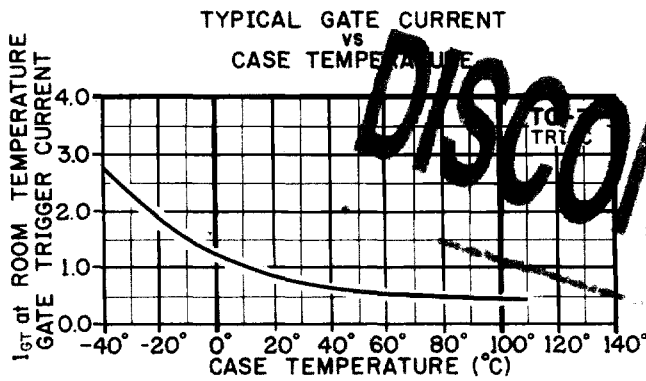
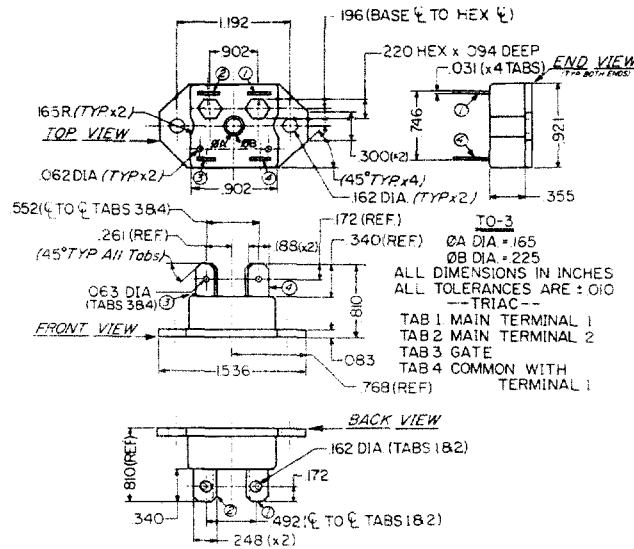
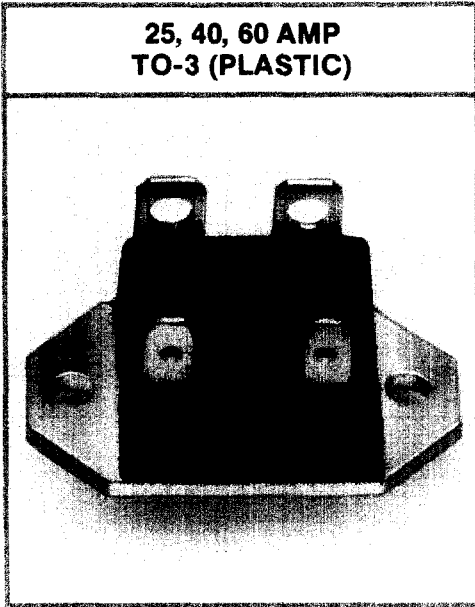
*Notes:

(1) All Values Apply in either direction

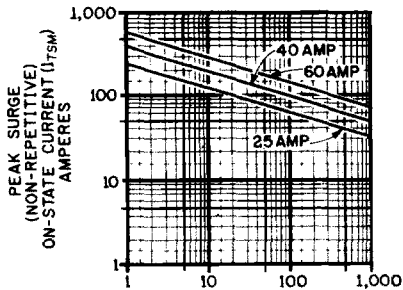


HUTSON INDUSTRIES TRIAC'S

**25, 40, 60 AMP
TO-3 (PLASTIC)**



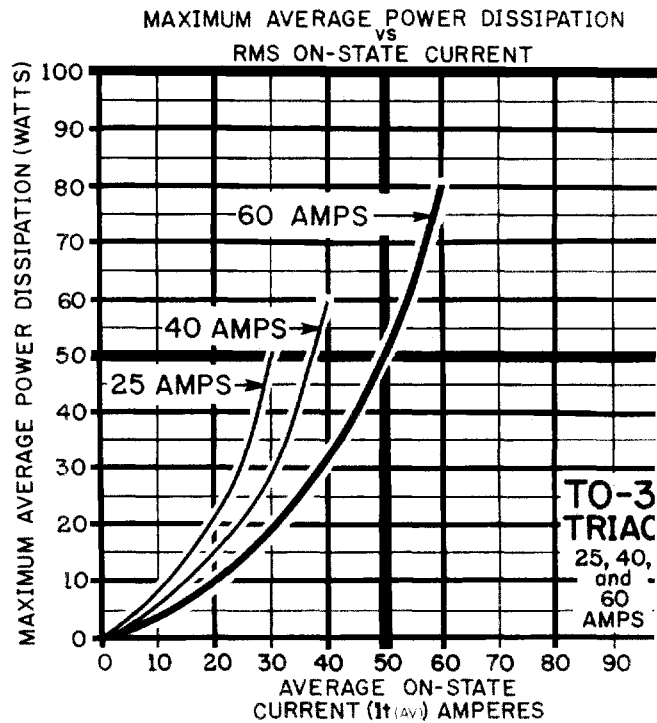
PEAK SURGE ON-STATE CURRENT
vs.
SURGE CURRENT DURATION



SURGE CURRENT DURATION, FULL CYCLES at 60 Hz

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_C RETURNS TO STEADY-STATE VALUE.

TO-3
TRIAC
25, 40,
and
60
AMPS



TO-3
TRIAC
25, 40,
and
60
AMPS