

		SYMBOL	V_{DROM}	DEVICE NOS. (NOTE 1)			UNITS
MAXIMUM RATINGS	Repetitive Peak Off-State Voltage, Gate Open, and $T_J = 100^\circ\text{C}$	V_{DROM}	50	08	010	015	VOLT
			100	18	110	115	
			200	28	210	215	
			300	38	310	315	
			400	48	410	415	
			500	58	510	515	
			600	68	610	615	
	RMS On-State Current at $T_C = 75^\circ\text{C}$ and Conduction Angle of 180°	I_{RMS}		8	10	15	AMP
Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60Hz	I_{TSM}		100	100	150	AMP	
Peak Gate-Trigger Current for $3\mu\text{sec}$, Max.	I_{GTM}		3	4	4	AMP	
Peak Gate-Power Dissipation at $I_{GT} \leq I_{GTM}$ for $3\mu\text{sec}$, Max.	P_{GM}		20	40	40	WATT	
Average Gate-Power Dissipation	$P_{G(AV)}$		0.2	0.5	0.8	WATT	
Storage Temperature Range	T_{stg}		← -40 to +150 →			$^\circ\text{C}$	
Operating Temperature Range, T_C	$T_{oper.}$		← -40 to +100 →			$^\circ\text{C}$	
ELECTRICAL CHARACTERISTICS At Maximum Ratings and at Specific Case Temperatures	Peak Off-State Current, Gate Open, $T_J = 100^\circ\text{C}$ $V_{DROM} = \text{Max. Rating}$	I_{DROM}		2.0 MAX	2.0 MAX	2.0 MAX	mA
	Maximum On-State Voltage at $T_C = 25^\circ\text{C}$ (Peak)	V_F		2.2 MAX	2.2 MAX	2.2 MAX	VOLTS
				Peak On-State Current			
	DC Holding Current, Gate Open and $T_C = 25^\circ\text{C}$	I_{HO}		50 MAX	50 MAX	50 MAX	mA
	Critical Rate-of-Rise of Off-State Voltage for $V_D = V_{DROM}$, Gate Open, $T_C = 100^\circ\text{C}$	Critical dv/dt		5 TYP	5 TYP	5 TYP	V/ μsec
	DC Gate-Trigger Current for $V_D = 12\text{VDC}$, $R_L = 30\Omega$ and at $T_C = 25^\circ\text{C}$ ($T_2 + \text{Gate} +$, $T_2 - \text{Gate} -$) Quads I and III ($T_2 + \text{Gate} -$, $T_2 - \text{Gate} +$) Quads II and IV (Note 2)	I_{GT}		50 MAX 80 MAX	50 MAX 80 MAX	50 MAX 80 MAX	mA mA
	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 MAX	2.5 MAX	2.5 MAX	VOLTS
	Gate-Controlled Turn-on Time for $V_D = V_{DROM}$, $I_{GT} = 80\text{mA}$, $t_r = 0.1\mu\text{sec}$, $I_T = 10\text{A}$ (Peak) and $T_C = 25^\circ\text{C}$	t_{GT}		2.5 TYP	2.5 TYP	2.5 TYP	μSEC
	Thermal Resistance, Junction-to-Case	$R_{\theta JC}$		2.5 TYP	2.5 TYP	*1.5 TYP	$^\circ\text{C/W}$

ALL VALUES APPLY IN EITHER DIRECTION

*BeO Substrate

ISOTT 00008-2X

ISOTAB (ELECTRICALLY ISOLATED) TRIACS

DEVICE NO. DESIGNATION

NOTE 1: I = ELECTRICALLY ISOLATED

T = TRIAC

0 to 6 = 50 to 600 V (V_{BOSS}) RATING
 8, 10, 15 = 8A, 10A & 15A ($I_{T(RMS)}$)

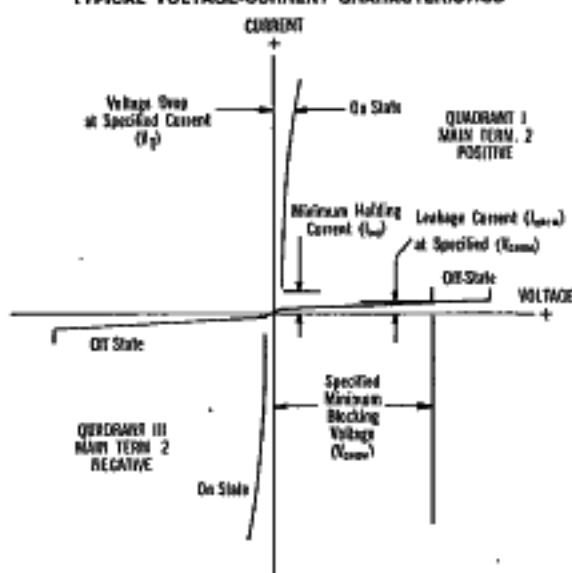
NOTE 2: For CHARACTERISTICS:

NO SUFFIX = 50 mA, I & III QUADS;
 80 mA, II & IV QUADS;
 A = 50 mA I & III QUADS ONLY
 B = 100 mA I & III QUADS ONLY
 HA = 25 mA I & III QUADS ONLY
 HX = 25 mA I & III QUADS 40 mA, QUADS II & IV

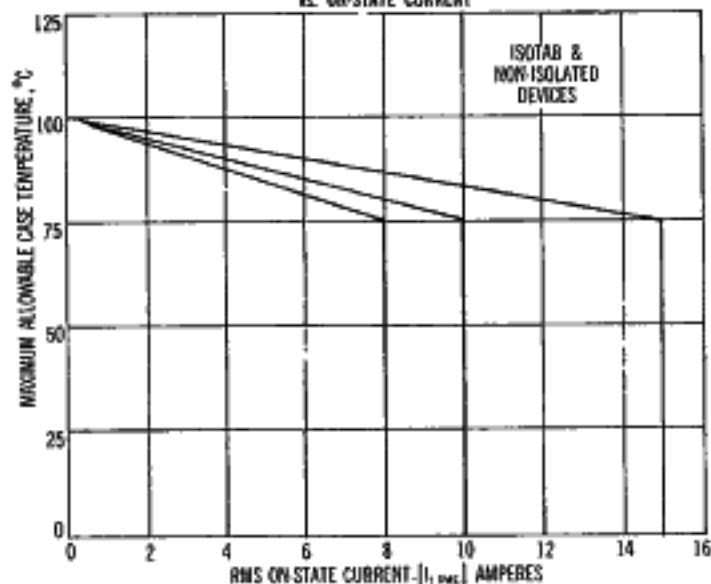
EXAMPLE
 I T 4 8 A

Example Device No.
 would be:
 an Electrically
 isolated Triac,
 400 V (V_{BOSS}),
 8A ($I_{T(RMS)}$) with
 50 mA (I_{GT})
 Quads I & III

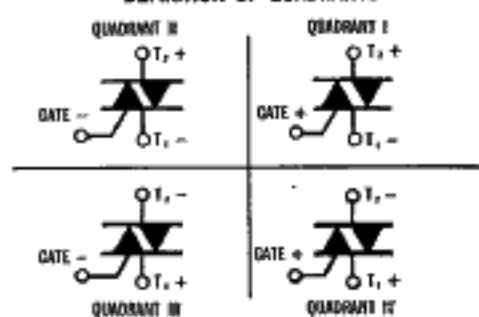
TYPICAL VOLTAGE-CURRENT CHARACTERISTICS



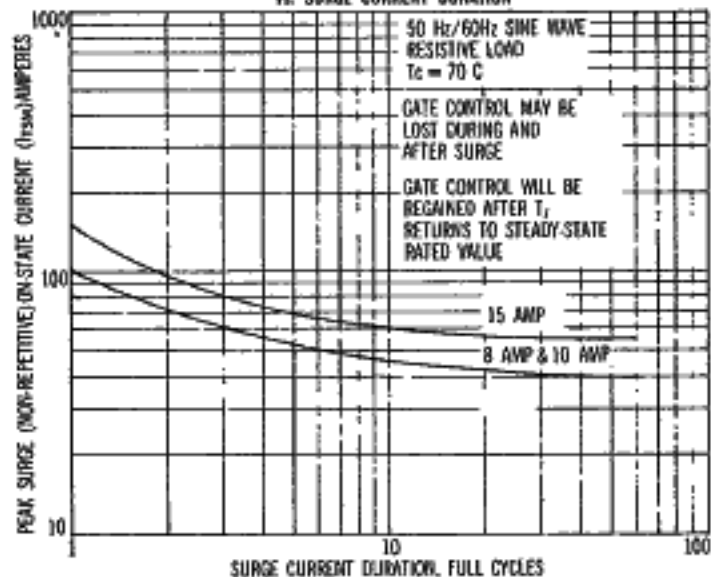
MAXIMUM ALLOWABLE CASE TEMPERATURE vs. ON-STATE CURRENT



DEFINITION OF QUADRANTS



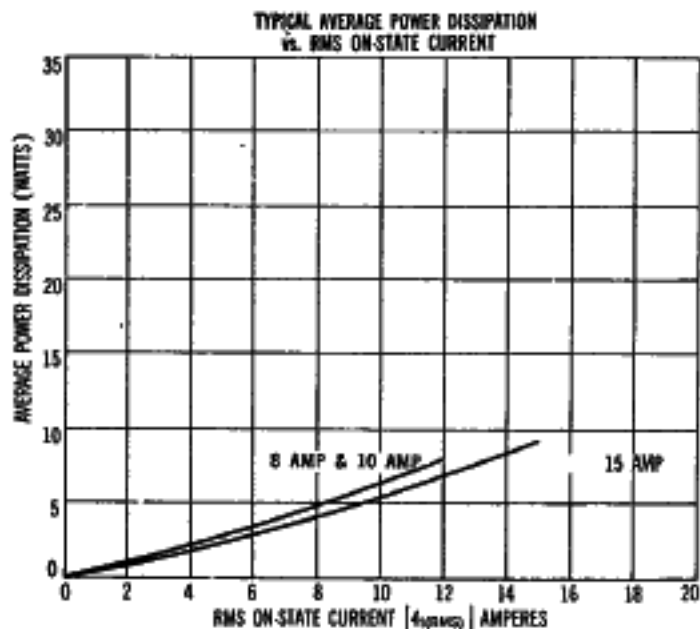
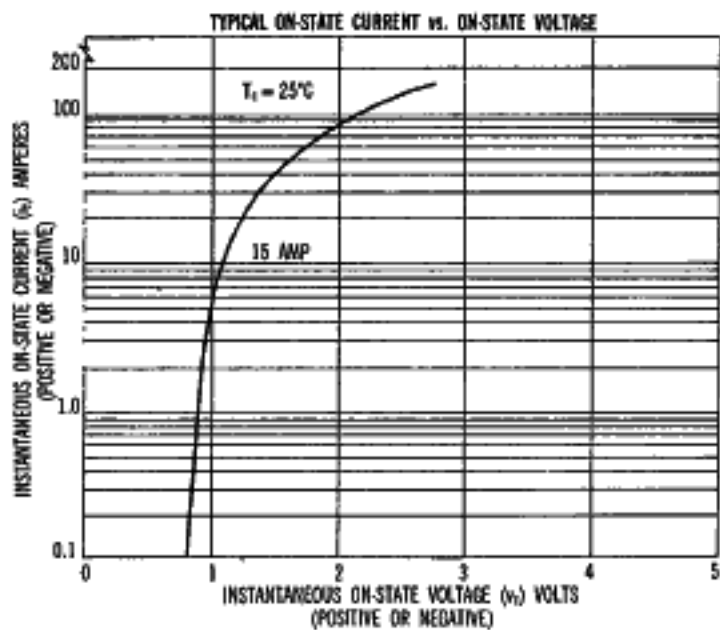
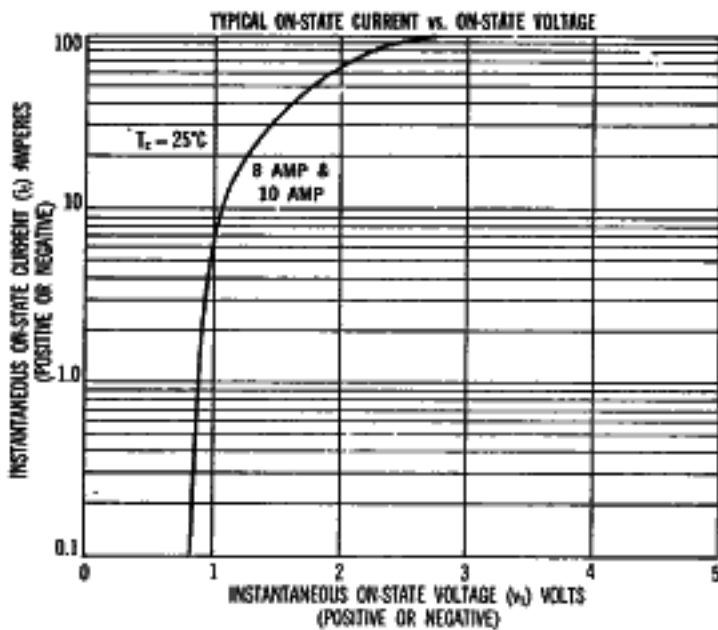
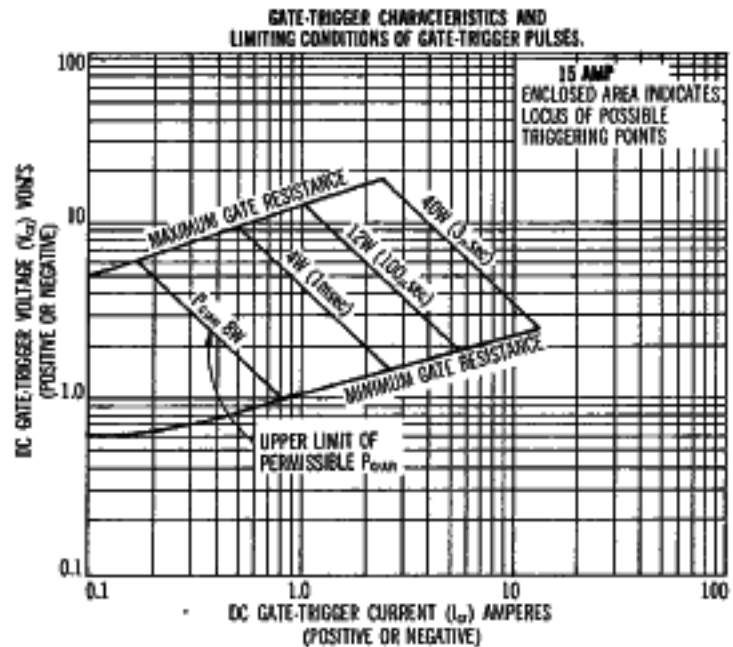
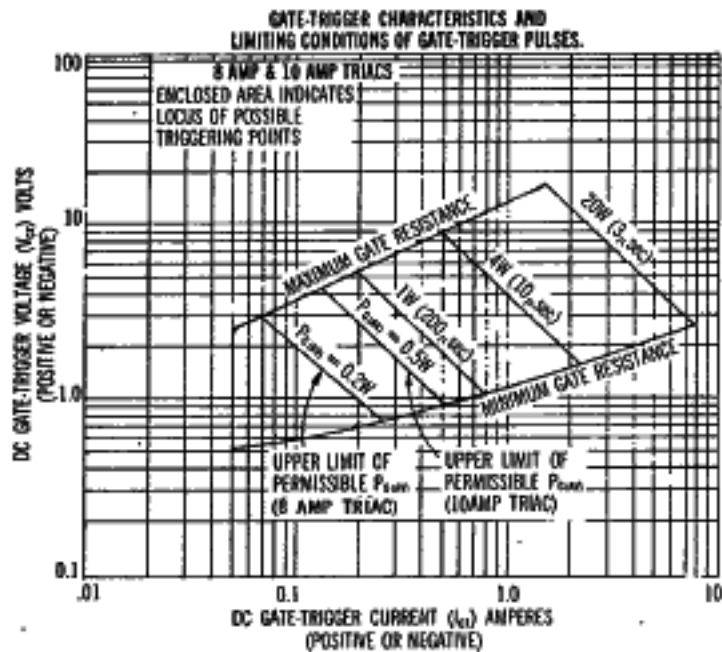
PEAK SURGE ON-STATE CURRENT vs. SURGE CURRENT DURATION



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HUTSON INDUSTRIES 8A, 10A, 15A ISOTAB (ELECTRICALLY ISOLATED) TRIACS



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