

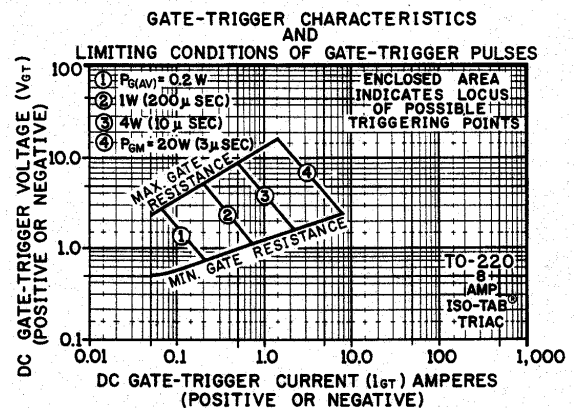
HUTSON INDUSTRIES, INC.

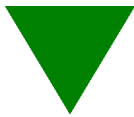
TO-220 ELECTRICALLY ISOLATED (ISOTAB[®]) SENSITIVE GATE TRIAC

MAXIMUM RATINGS	SYMBOL	VDRM	DEVICE NUMBERS				UNITS
REPETITIVE PEAK OFF-STATE VOLTAGE (1) GATE OPEN, AND $T_J = 110^\circ\text{C}$	VDRM	200 400 600	IT28SD IT48SD IT68SD	IT28TD IT48TD IT68TD	IT28SG IT48SG IT68SG	IT28TG IT48TG IT68TG	VOLT
RMS ON-STATE CURRENT AT $T_C = 80^\circ\text{C}$ AND CONDUCTION, ANGLE OF 360°	IT(RMS)		8.0	8.0	8.0	8.0	AMP
PEAK SURGE (NON-REPETITIVE) ON-STATE CURRENT, ONE-CYCLE, AT 50HZ OR 60HZ	ITSM		80	80	80	80	AMP
PEAK GATE - TRIGGER CURRENT FOR $3\mu\text{SEC. MAX.}$	IGTM		2	2	2	2	AMP
PEAK GATE-POWER DISSIPATION AT $IGT < IGTM$	PGM		20	20	20	20	WATT
AVERAGE GATE - POWER DISSIPATION	PG(AV)		0.2	0.2	0.2	0.2	WATT
STORAGE TEMPERATURE RANGE	TSTG		-40 TO +150				$^\circ\text{C}$
OPERATING TEMPERATURE RANGE, T_J	TOPER		-40 TO +110				$^\circ\text{C}$
ELECTRICAL CHARACTERISTICS							
At Specified Case Temperatures							
PEAK OFF - STATE CURRENT (1) GATE OPEN $T_C = 110^\circ\text{C}$ VDRM = MAX. RATING	IDRM		0.5	0.5	0.5	0.5	MA MAX.
MAXIMUM ON - STATE VOLTAGE, (1) AT $T_C = 25^\circ\text{C}$ AND $IT = \text{RATED AMPS}$	VTM		1.6	1.6	1.6	1.6	VOLT MAX.
DC HOLDING CURRENT, (1) GATE OPEN AND $T_C = 25^\circ\text{C}$	IHO		25	25	25	25	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		30	30	30	30	V/ $\mu\text{SEC.}$
CRITICAL RATE-OF-RISE OF COMMUTATION VOLTAGE, (1) AT $T_C = 80^\circ\text{C}$, GATE UNENERGIZED, $V_D = V_{DRM}$ $IT = IT (\text{RMS})$	COMMUTATING dv/dt		2	2	2	2	V/ $\mu\text{SEC.}$
DC GATE - TRIGGER CURRENT FOR $V_D = 12\text{VDC}$. $RL = 60\ \Omega$ AND AT $T_C = 25^\circ\text{C}$ ($T_2 + \text{GATE} + T_2 - \text{GATE}-$) QUADS I & III ($T_2 + \text{GATE} - T_2 - \text{GATE}+$) QUADS II & IV	IGT		5 ALL QUAD S	5 I, II, III	10 ALL QUAD S	10 I, II, III	MA MAX.
DC GATE - TRIGGER VOLTAGE FOR $V_D = 12\text{VDC}$. $RL = 60\ \Omega$ AND AT $T_C = 25^\circ\text{C}$	VGT		2.2	2.2	2.2	2.2	VOLT MAX.
GATE CONTROLLED TURN-ON TIME FOR $V_D = V_{DRM}$ $IGT = 80\text{MA}$ $TR = 0.1\ \mu\text{SEC.}$ $IT = 10\text{A (PEAK)}$ AND $T_C = 25^\circ\text{C}$	TGT		2.2	2.2	2.2	2.2	$\mu\text{SEC.}$
THERMAL RESISTANCE, JUNCTION-TO-CASE	R θ J-C		2.5	2.5	2.5	2.5	$^\circ\text{C} / \text{WATT}$ TYP

***NOTES:**

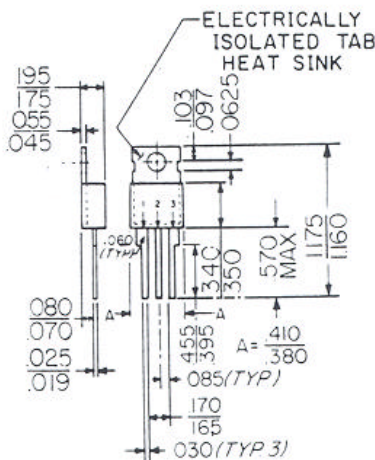
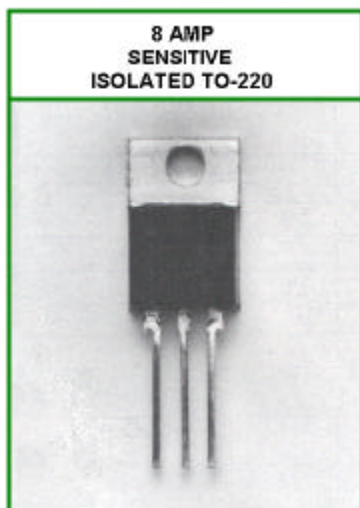
- (1) ALL VALUES APPLY IN EITHER DIRECTION
- *Trademark of Hutson Industries, Inc.
- (2) ALL HUTSON ISOLATED TO-220 TRIAC DEVICES
ARE UL RECOGNIZED. UL NUMBER E95589 (N)



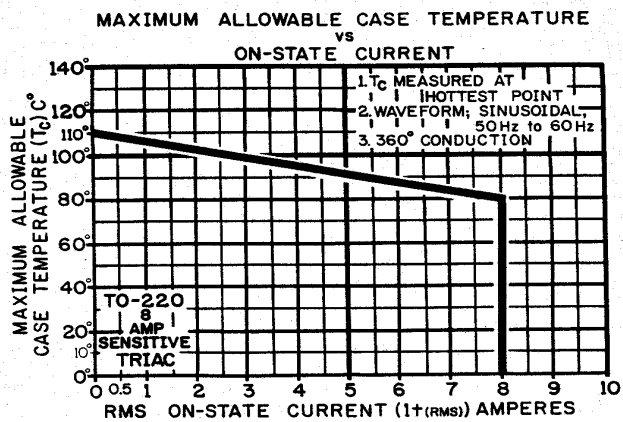
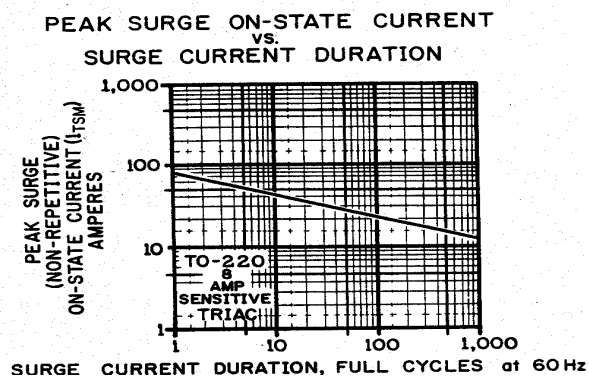
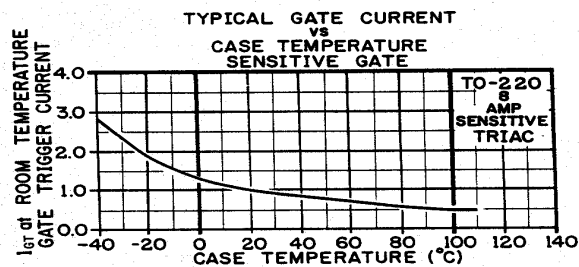
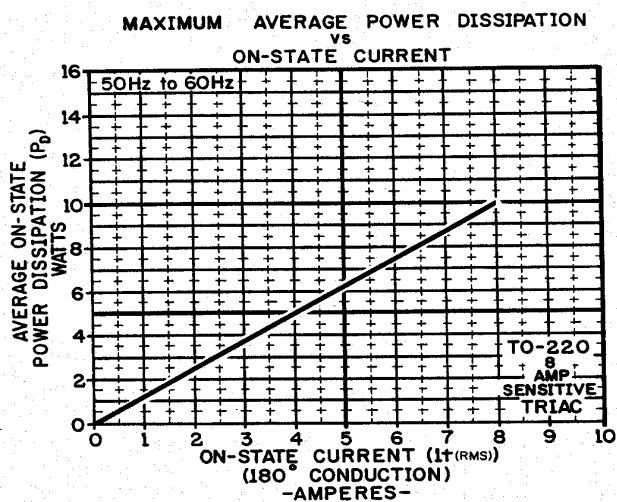


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TO-220 ELECTRICALLY ISOLATED (ISOTAB[®]) SENSITIVE GATE TRIAC



TO-220
ELECTRICALLY ISOLATED TAB PACKAGE
 ALL DIMENSIONS IN INCHES
 INTERNAL CONNECTIONS
 --ISOLATED TRIAC--
 1. Main Terminal 1
 2. Main Terminal 2
 3. Gate



CURRENT WAVEFORM:
 SINUSOIDIAL, 60Hz
 RESISTIVE LOAD
 $I_{tr(RMS)} = \text{AMPS at } 80^\circ\text{C}$
 GATE CONTROL MAY BE LOST DURING AND AFTER SURGE.
 GATE CONTROL WILL BE REGAINED AFTER T_j RETURNS TO STEADY STATE VALUE.