

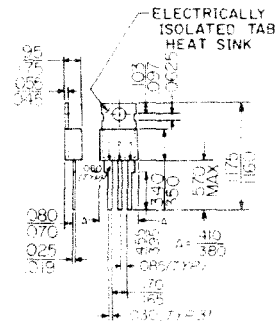
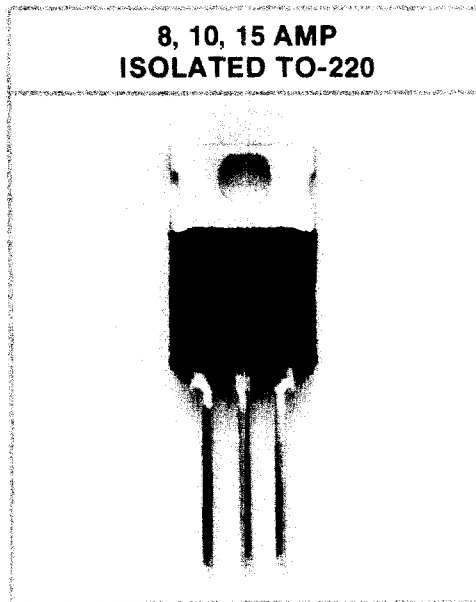
# TO-220 ELECTRICALLY ISOLATED (ISOTAB™) TRIDAC\*

MAXIMUM RATINGS		SYMBOL	V <sub>DRM</sub>	DEVICE NUMBERS			UNITS
Repetitive Peak Off-State Voltage (1) Gate Open, and T <sub>J</sub> = 110° C		V <sub>DRM</sub>	200 400 500 600	TD28 TD48 TD58 TD68	TD210 TD410 TD510 TD610	TD215 TD415 TD515 TD615	VOLT
RMS On-State Current at T <sub>C</sub> = 80°C and Conduction Angle of 360°		I <sub>T(RMS)</sub>		8.0	10.0	15.0	AMP
Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60Hz		I <sub>TSM</sub>		80	100	150	AMP
Peak Gate-Trigger Current for 3μsec. Max.		I <sub>GTM</sub>		1.5	1.5	1.5	AMP
Storage Temperature Range		T <sub>stg</sub>		-40 to +150			°C
Operating Temperature Range, T <sub>J</sub>		T <sub>oper</sub>		-40 to +110			°C
<b>ELECTRICAL CHARACTERISTICS</b> At Specified Case Temperatures							
Peak Off-State Current, (1) Gate Open T <sub>C</sub> = 110°C V <sub>DRM</sub> = Max. Rating		I <sub>DRM</sub>		0.5	0.5	0.5	mA MAX
Maximum On-State Voltage, (1) at T <sub>C</sub> = 25°C and I <sub>T</sub> = Rated Amps		V <sub>TM</sub>		1.6	1.6	1.6	VOLT MAX
DC Holding Current, (1) Gate Open and T <sub>C</sub> = 25°C		I <sub>HO</sub>		60	60	70	mA MAX
Critical Rate-Of-Rise of Off-State Voltage, (1) for V <sub>D</sub> = V <sub>DRM</sub> Gate Open, T <sub>C</sub> = 110°C		Critical dv/dt		60	60	60	V/μsec
Critical Rate-Of-Rise of Commutation Voltage, (1) at T <sub>C</sub> = 80°C, Gate Unenergized, V <sub>D</sub> = V <sub>DRM</sub> I <sub>T</sub> = I <sub>T(RMS)</sub>		Commutating dv/dt		4	4	4	V/μsec.
Gate-Controlled Turn-on Time for V <sub>D</sub> = V <sub>DRM</sub> I <sub>R</sub> = 0.1 μsec., I <sub>T</sub> = 10A (Peak) and T <sub>C</sub> = 25°C		T <sub>on</sub>		3	3	3	μsec.
Thermal Resistance, Junction-to-Case		R <sub>θJ-C</sub>		2.8	2.8	2.0	°C/WATT TYP
TRIGGER DIAC SPECIFICATIONS	Breakover Voltage Symmetry	ΔV <sub>(BO)</sub>		3	3	3	Volt
	Breakover Voltage (Forward & Reverse)	V <sub>BO</sub>		30	30	30	V min
				45	45	45	V max
	Dynamic Breakback Voltage (Forward & Reverse)	[ΔV ± ]		5	5	5	Volt
	Peak Breakover Current	I <sub>BO</sub>		200	200	200	μA
Trigger Firing Capacitance	C		0.1	0.1	0.1	μF	

DISCONTINUED

**\*Notes:**

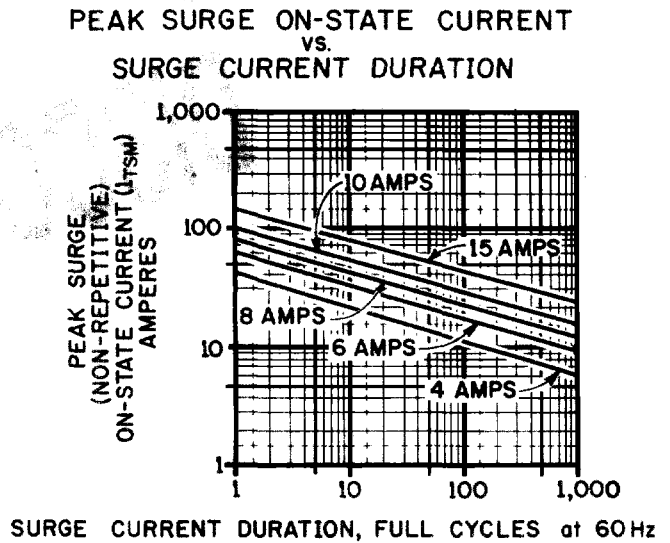
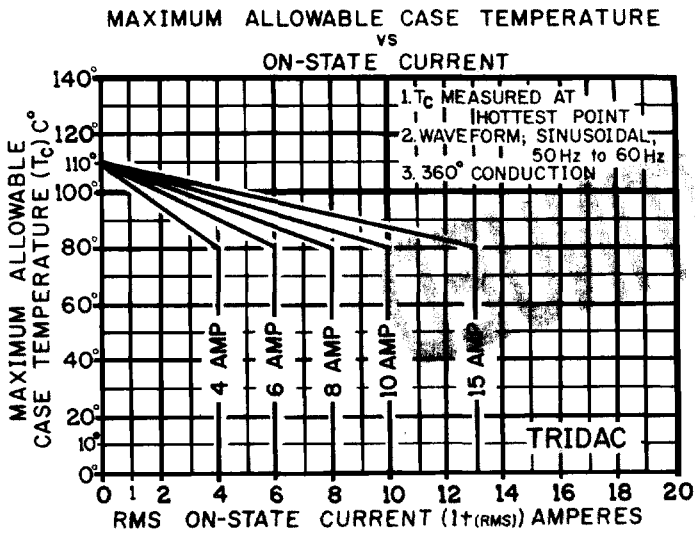
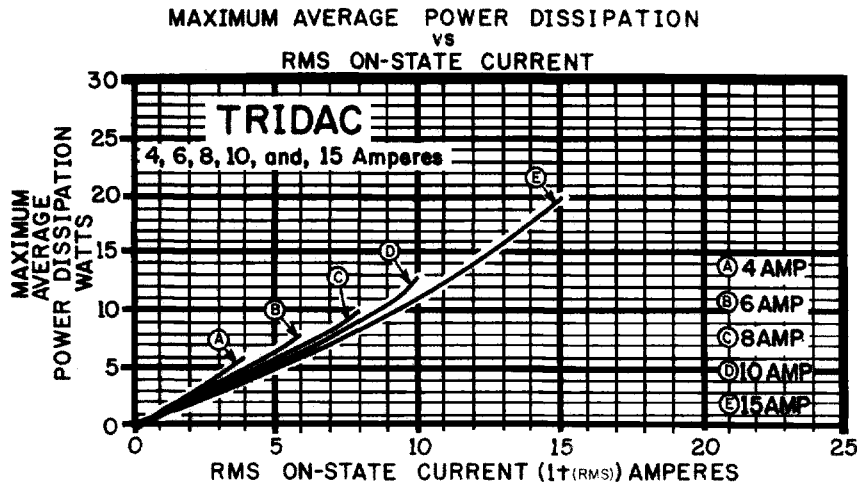
- (1) All Values Apply in either direction
- TRIDAC is a registered trademark of Hutson Industries.
- All Hutson Isolated Tridacs are UL recognized.
- UL Number E95589 (N)
- \* Trademark of Hutson Industries



**TO-220**  
ELECTRICALLY ISOLATED TAB PACKAGE  
ALL DIMENSIONS IN INCHES  
INTERNAL CONNECTIONS  
ISOLATED TRIDAC

1. Main Terminal 1
2. Main Terminal 2
3. Gate

# HUTSON INDUSTRIES TRIDAC®



CURRENT WAVEFORM:  
SINUSOIDAL, 60 Hz  
RESISTIVE LOAD  
I<sub>T(RMS)</sub> = RATED AMPS at 80° T<sub>c</sub>  
GATE CONTROL MAY BE LOST DURING AND AFTER SURGE.  
GATE CONTROL WILL BE REGAINED AFTER T<sub>j</sub> RETURNS TO STEADY-STATE VALUE.

## TRIDAC

4, 6, 8, 10, and, 15 Amperes