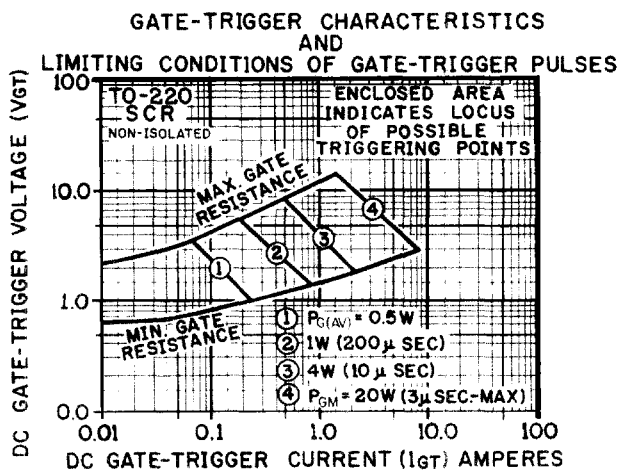


# TO-220 NONISOLATED SCR

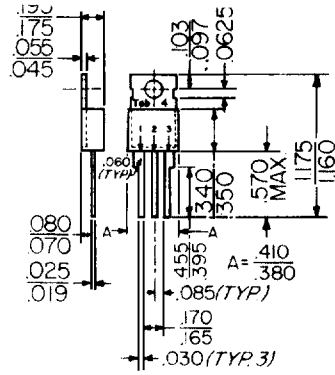
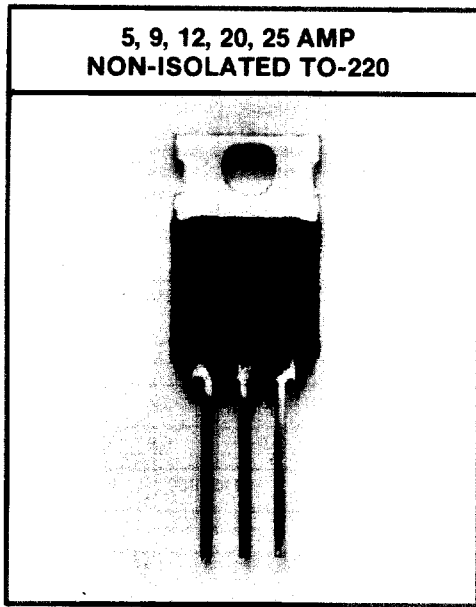
MAXIMUM RATINGS	SYMBOL	V	DEVICE NUMBERS					UNITS
Repetitive Peak Off-State Voltage and Repetitive Peak Reverse Voltage Gate Open, and $T_J = 110^\circ\text{C}$	$V_{DRM}$ &	50	NS005	NS009	NS012	NS020	NS025	VOLT
		100	NS105	NS109	NS112	NS120	NS125	
	$V_{RRM}$	200	NS205	NS209	NS212	NS220	NS225	
		400	NS405	NS409	NS412	NS420	NS425	
		600	NS605	NS609	NS612	NS620	NS625	
RMS On-State Current at $T_C = 80^\circ\text{C}$ and Conduction Angle of $180^\circ$	$I_T(\text{RMS})$		5.0	9.0	12.0	20.0	25.0	AMP
Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60Hz	$I_{TSM}$		50	90	120	200	250	AMP
Peak Gate-Trigger Current for $3\mu\text{sec}$ . Max.	$I_{GTM}$		2	2	2	2	2	AMP
Peak Gate-Power Dissipation at $I_{GT} \leq I_{GTM}$	$P_{GM}$		20	20	20	20	20	WATT
Average Gate-Power Dissipation	$P_{G(AV)}$		0.5	0.5	0.5	0.5	0.5	WATT
Storage Temperature Range	$T_{stg}$		-40 to +150					$^\circ\text{C}$
Operating Temperature Range, $T_J$	$T_{oper}$		-40 to +110					$^\circ\text{C}$
<b>ELECTRICAL CHARACTERISTICS</b> At Specified Case Temperatures								
Peak Off-State Current, Gate Open $T_C = 110^\circ\text{C}$ $V_{DRM}$ & $V_{RRM} = \text{Max. Rating}$	$I_{DRM}$ & $I_{RRM}$		0.5	0.5	0.5	0.5	0.5	mA MAX
Maximum On-State Voltage, (Peak) at $T_C = 25^\circ\text{C}$ and $I_T = \text{Rated Amps}$	$V_{TM}$		1.8	1.6	1.5	1.4		VOLT MAX
DC Holding Current, Gate Open and $T_C = 25^\circ\text{C}$	$I_{TH}$		40	40	40			mA MAX
Critical Rate-Of-Rise of Off-State Voltage, Gate Open, $T_C = 110^\circ\text{C}$	$dV/dt_{crit}$		200	200	200	200	200	V/ $\mu\text{sec}$ .
DC Gate-Trigger Current for Anode Voltage = 12VDC, $R_L = 60\Omega$ and at $T_C = 25^\circ\text{C}$	$I_{GT}$		25	25	25	25	25	mA MAX
DC Gate-Trigger Voltage for Anode Voltage 12VDC, $R_L = 60\Omega$ and at $T_C = 25^\circ\text{C}$	$V_{GT}$		1.5	1.5	1.5	1.5	1.5	VOLT MAX
Gate-Controlled Turn-on Time for $t_D + t_R$ $I_{GT} = 100\text{mA}$ and $T_C = 25^\circ\text{C}$	$T_{gt}$		2	2	2	2	2	$\mu\text{sec}$ .
Thermal Resistance, Junction-to-Case	$R_{\theta J-C}$		2.8	2.8	2.75	2.7	2.6	$^\circ\text{C}/\text{WATT}$ TYP

DISCONTINUED

\*NOTE:  
Production available  
1989 for 5.0 and 9.0  
Amp. devices.

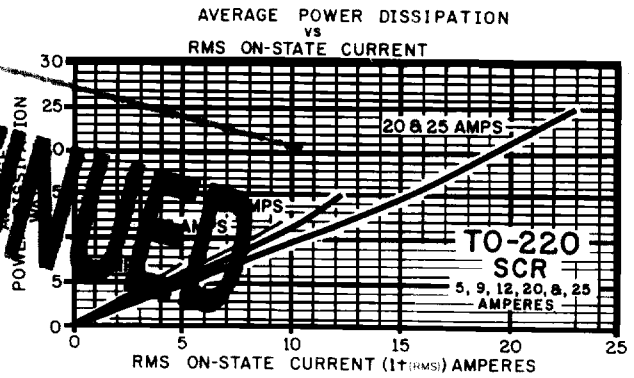
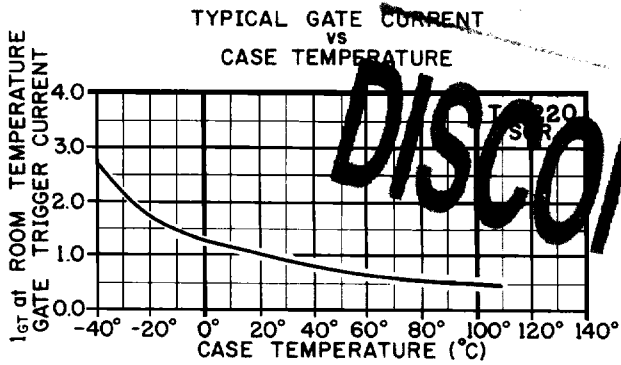


# HUTSON INDUSTRIES SCR'S

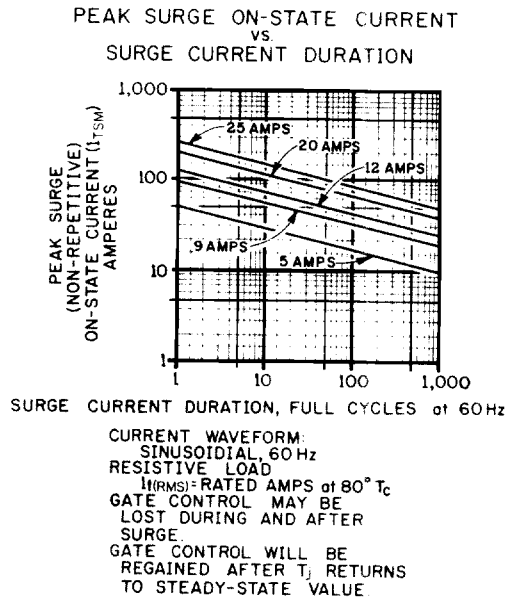
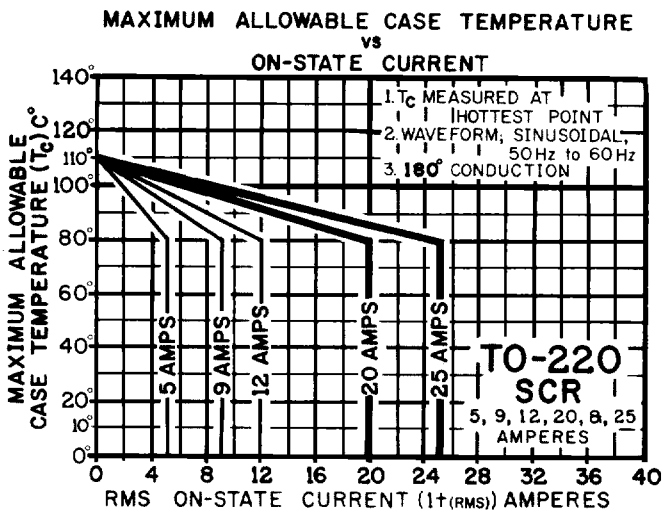


**TO-220**

- ALL DIMENSIONS IN INCHES  
 INTERNAL CONNECTIONS  
 ---NON-ISOLATED SCR---
1. Cathode
  2. Anode
  3. Gate
  4. Tab Common to Terminal 2



DISCONTINUED



**TO-220  
SCR  
5, 9, 12, 20, & 25  
AMPERES**