



HUTSON INDUSTRIES, INC.

TO-202 SENSITIVE GATE SCR

MAXIMUM RATINGS	SYMBOL	VDRM	DEVICE NUMBERS			UNITS
REPETITIVE PEAK OFF-STATE VOLTAGE (1) GATE OPEN, AND T _J = 110° C	VDRM & VRRM	50 100 200 400 600	200µA Gate			VOLT
			S106F*	S206F*	S306F*	
			S106A*	S206A*	S306A*	
			S106B*	S206B*	S306B*	
			S106D*	S206D*	S306D*	
			S106M*	S206M*	S306M*	
		50 100 200 400 600	500µA Gate			
			S107F*	S207F*	S307F*	
			S107A*	S207A*	S307A*	
			S107B*	S207B*	S307B*	
			S107D*	S207D*	S307D*	
			S107M*	S207M*	S307M*	
RMS ON-STATE CURRENT AT TC = 80° C AND CONDUCTION, ANGLE OF 360°	IT(RMS)		4.0	6.0	8.0	AMP
PEAK SURGE (NON-REPETITIVE) ON-STATE CURRENT, ONE-CYCLE, AT 50HZ OR 60HZ	ITSM		40	60	80	AMP
PEAK GATE - TRIGGER CURRENT FOR 3µSEC. MAX.	IGTM		1	1	1	AMP
PEAK GATE - POWER DISSIPATION AT IGT ≤ IGTM	PGM		15	15	15	WATT
AVERAGE GATE - POWER DISSIPATION	PG(AV)		0.1	0.1	0.1	WATT
STORAGE TEMPERATURE RANGE	Tstg		-40 to +150			°C
OPERATING TEMPERATURE RANGE, T _j	Toper		-40 to +110			°C
ELECTRICAL CHARACTERISTICS AT SPECIFIED CASE TEMPERATURE						
PEAK OFF - STATE CURRENT (1) TC = 110° C VDRM & VRRM = MAX. RATING	IDRM & IRRM		0.1	0.1	0.1	MA MAX.
MAXIMUM ON - STATE VOLTAGE, (PEAK) AT TC = 25° C AND IT = RATED AMPS	VTM		2.2	1.6	2.5	VOLT MAX.
DC HOLDING CURRENT, (1) AND TC = 25° C	IHO		3	6	6	MA MAX.
CRITICAL RATE-OF-RISE OF OFF-STATE VOLTAGE, (1) FOR VD = VDRM GATE OPEN, TC = 110° C	CRITICAL dv/dt		8	5	5	V/µSEC.
DC GATE-TRIGGER CURRENT FOR ANODE VOLTAGE - 6VDC, RL = 100 Ω AND AT TC = 25° C	IGT		200	200	200	µA MAX.
			500	500	500	µA MAX.
DC GATE - TRIGGER VOLTAGE FOR ANODE VOLTAGE = 6VDC, RL = 100 Ω AND AT TC = 25° C	VGT		0.8	0.8	0.8	VOLT MAX.
GATE CONTROLLED TURN-ON TIME FOR t _D + t _R , IGT = 20 mA and TC = 25° C	T _{gt}		1.2	2	2	µsec.
THERMAL RESISTANCE, JUNCTION-TO-CASE	RθJ-C		5	4.4	4.4	°C / WATT TYP

*Note:

Device number suffix 1 = with TAB (Type 1)

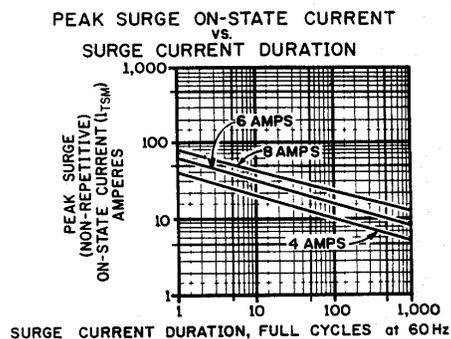
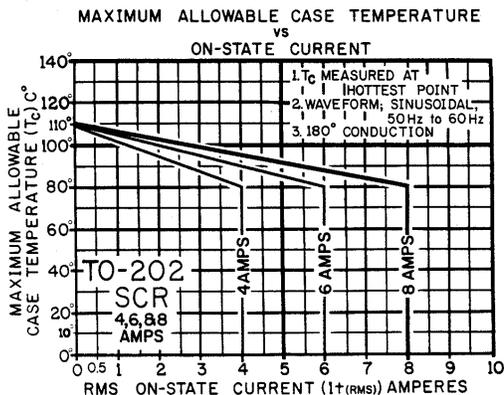
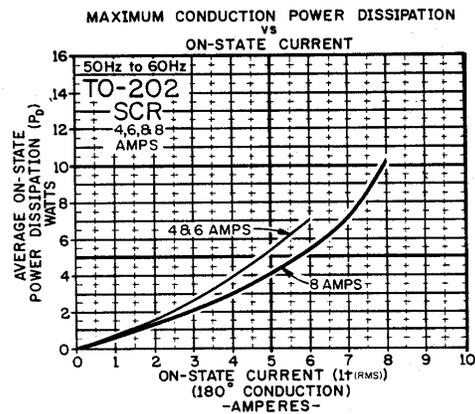
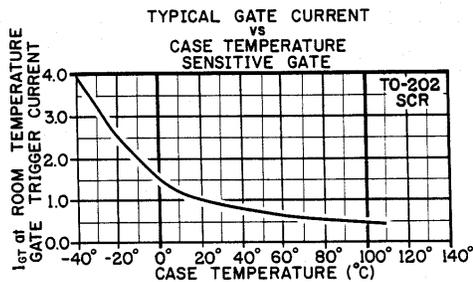
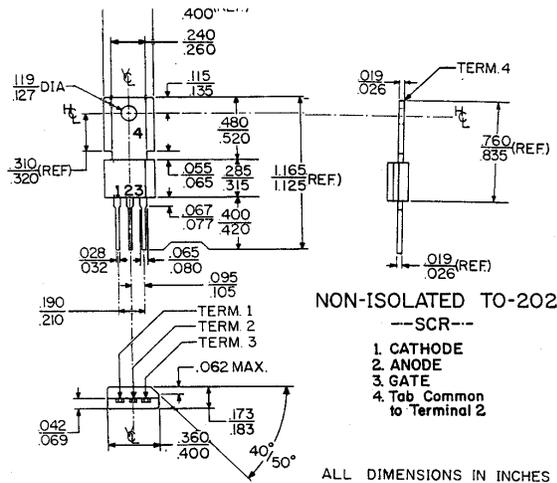
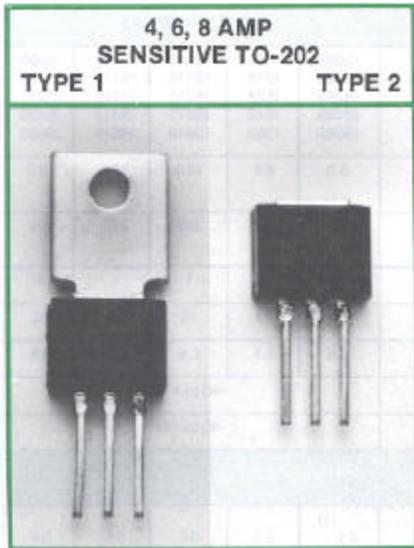
Device number suffix 2 = no TAB (Type 2)

(1) R G - K = 1 K Ω



HUTSON INDUSTRIES, INC.

TO-202 SENSITIVE GATE SCR



CURRENT WAVEFORM:
SINUSOIDAL, 60 Hz
RESISTIVE LOAD
 $I_{tr(RMS)}$ = RATED AMPS at 80° T_c
GATE CONTROL MAY BE LOST DURING AND AFTER SURGE.
GATE CONTROL WILL BE REGAINED AFTER T_J RETURNS TO STEADY-STATE VALUE.

TO-202
SCR
4,6,8,8
AMPS