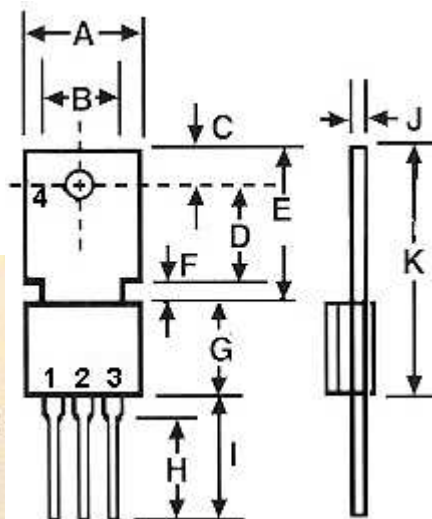
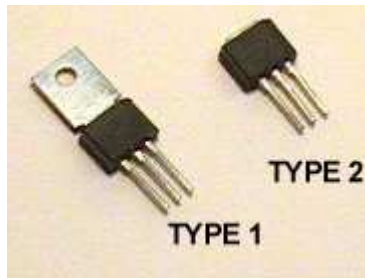


# Hutson Industries, Inc.

1000 Hutson Circle  
 Frisco, TX 75034  
 TEL:(972)335-8600  
 Fax:(972)377-2197

## TO-202 SENSITIVE GATE SCR



SYM	INCHES	
A	0.360	0.400
B	0.240	0.260
C	0.115	0.135
D	0.310	0.320
E	0.480	0.520
F	0.055	0.065
G	0.285	0.315
H	0.333	0.343
I	0.400	0.420
J	0.019	0.026
K	0.760	0.835

1. Cathode
2. Anode
3. GATE
4. Tab Common to Anode

MAXIMUM RATINGS	SYMBOL	DEVICE NUMBERS			UNITS
REPETITIVE PEAK OFF-STATE VOLTAGE AND REPETITIVE PEAK REVERSE VOLTAGE. GATE OPEN, AND T <sub>J</sub> = 110° C	50 100 200 400 600	200µA Gate			VOLT
		S106F* S106A* S106B* S106D* S106M*	S206F* S206A* S206B* S206D* S206M*	S306F* S306A* S306B* S306D* S306M*	
	50 100 200 400 600	500µA Gate			
		S107F* S107A* S107B* S107D* S107M*	S207F* S207A* S207B* S207D* S207M*	S307F* S307A* S307B* S307D* S307M*	
RMS ON-STATE CURRENT AT TC = 80° C AND CONDUCTION, ANGLE OF 360°	I <sub>T(RMS)</sub>	4.0	6.0	8.0	AMP
PEAK SURGE (NON-REPETITIVE) ON-STATE CURRENT, ONE-CYCLE, AT 50HZ OR 60HZ	I <sub>TSM</sub>	40	60	80	AMP
PEAK GATE - TRIGGER CURRENT FOR 3µSEC. MAX.	I <sub>GT</sub>	1	1	1	AMP
PEAK GATE - POWER DISSIPATION AT I <sub>GT</sub> ≤ I <sub>GT</sub>	P <sub>GM</sub>	15	15	15	WATT
AVERAGE GATE - POWER DISSIPATION	P <sub>G(AV)</sub>	0.1	0.1	0.1	WATT
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
PEAK OFF - STATE CURRENT (1) TC = 110° C V <sub>DRM</sub> & V <sub>RRM</sub> = MAX. RATING	I <sub>DRM</sub> & I <sub>RRM</sub>	0.1	0.1	0.1	MA MAX.
MAXIMUM ON - STATE VOLTAGE, (PEAK) AT TC=25° C AND I <sub>T</sub> = RATED AMPS	V <sub>TM</sub>	2.2	1.6	2.5	VOLT MAX.
DC HOLDING CURRENT, (1) AND TC = 25° C	I <sub>HO</sub>	3	6	6	MA MAX.
CRITICAL RATE-OF-RISE OF OFF-STATE VOLTAGE, (1) FOR V <sub>D</sub> = V <sub>DRM</sub> GATE OPEN, TC=110° C	CRITICAL dv/dt	8	5	5	V/µSEC.
DC GATE-TRIGGER CURRENT FOR ANODE VOLTAGE = 6VDC, R <sub>L</sub> =100 OHM AND AT TC = 25° C	I <sub>GT</sub>	200	200	200	µA MAX.
		500	500	500	µA MAX.
DC GATE - TRIGGER VOLTAGE FOR ANODE VOLTAGE=6VDC, R <sub>L</sub> =100 OHM AND AT TC = 25° C	V <sub>GT</sub>	0.8	0.8	0.8	VOLT MAX.
GATE CONTROLLED TURN-ON TIME FOR t <sub>D</sub> + t <sub>R</sub> , I <sub>GT</sub> = 20 mA and TC = 25° C	T <sub>gt</sub>	1.2	2	2	µsec.
THERMAL RESISTANCE, JUNCTION-TO-CASE	R <sub>θJ-C</sub>	5	4.4	4.4	°C / WATT TYP

NOTE:(1) R G-K=1K OHM. \*INDICATE TYPE 1 OR TYPE 2.