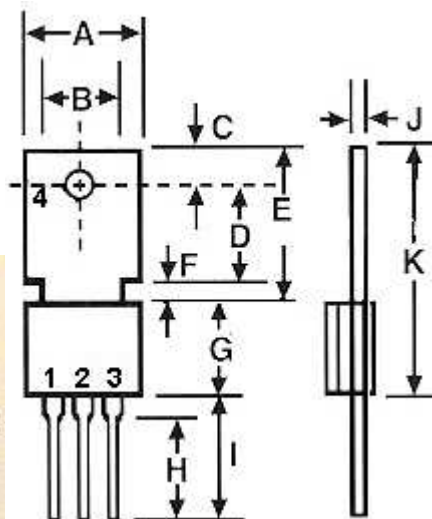
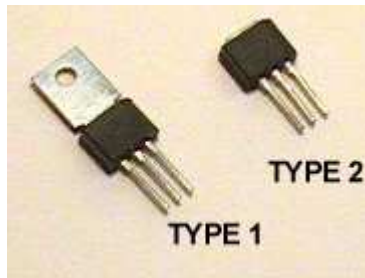


# Hutson Industries, Inc.

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

## TO-202 SENSITIVE GATE TRIAC



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. MT 1
2. MT 2
3. GATE
4. Tab Common to MT 2

MAXIMUM RATINGS	SYMBOL	DEVICE NUMBERS				UNITS
REPETITIVE PEAK OFF-STATE VOLTAGE (1) GATE OPEN, AND $T_J = 110^\circ\text{C}/V_{RM}$	200 400 600	T106B*SS T106D*SS T106M*SS	T106B*SD T106D*SD T106M*SD	T106B*SG T106D*SG T106M*SG	T106B*SH T106D*SH T106M*SH	VOLT
RMS ON-STATE CURRENT AT $T_C = 80^\circ\text{C}$ AND CONDUCTION, ANGLE OF $360^\circ$	$I_T(\text{RMS})$	4.0	4.0	4.0	4.0	AMP
PEAK SURGE (NON-REPETITIVE) ON-STATE CURRENT, ONE- CYCLE, AT 50HZ OR 60HZ	$I_{TSM}$	40	40	40	40	AMP
PEAK GATE - TRIGGER CURRENT FOR $3\mu\text{SEC. MAX.}$	$I_{GTM}$	1.2	1.2	1.2	1.2	AMP
PEAK GATE-POWER DISSIPATION AT $I_{GT} \leq I_{GTM}$	$P_{GM}$	15	15	15	15	WATT
AVERAGE GATE - POWER DISSIPATION	$P_{G(AV)}$	0.3	0.3	0.3	0.3	WATT
STORAGE TEMPERATURE RANGE	$T_{stg}$	-40 to +150				$^\circ\text{C}$
OPERATING TEMPERATURE RANGE, $T_J$	$T_{oper}$	-40 to +110				$^\circ\text{C}$
PEAK OFF - STATE CURRENT (1) GATE OPEN $T_C=110^\circ\text{C}$ $V_{DRM}=\text{MAX. RATING}$	$I_{DRM}$	0.5	0.5	0.5	0.5	MA MAX.
MAXIMUM ON - STATE VOLTAGE, (1) AT $T_C = 25^\circ\text{C}$ AND $I_T =$ RATED AMPS	$V_{TM}$	1.6	1.6	1.6	1.6	VOLT MAX.
DC HOLDING CURRENT, (1) GATE OPEN AND $T_C=25^\circ\text{C}$	$I_{HO}$	5	10	15	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 $dv/dt$	10	10	15	25	$V/\mu\text{SEC.}$
CRITICAL RATE-OF-RISE OF COMMUTATION VOLTAGE, (1) AT $T_C=80^\circ\text{C}$ , GATE UNENERGIZED, $V_D=V_{DRM}$ , $I_T=I_T(\text{RMS})$	COMMUTATING $dv/dt$	1	1	1	1	$V/\mu\text{SEC.}$
DC GATE - TRIGGER CURRENT FOR $V_D=12\text{VDC}$ . $R_L=60\text{ OHM}$ AND AT $T_C=25^\circ\text{C}$ ( $T_2 + \text{GATE} + T_2 - \text{GATE}-$ ) Q 1 & 3 ( $T_2 + \text{GATE} - T_2 - \text{GATE}+$ ) Q 2 & 4	$I_{GT}$	3	5	10	25	MA MAX.
DC GATE - TRIGGER VOLTAGE FOR $V_D=12\text{VDC}$ . $R_L=60\text{ OHM}$ AND AT $T_C=25^\circ\text{C}$	$V_{GT}$	2.0	2.0	2.0	2.0	VOLT MAX.
GATE CONTROLLED TURN-ON TIME FOR $V_D=V_{DRM}$ $I_{GT}=80\text{MA}$ $T_R=0.1\mu\text{SEC.}$ $I_T=6\text{A (PEAK)}$ AND $T_C=25^\circ\text{C}$	$T_{gt}$	3	3	3	3	$\mu\text{SEC.}$
THERMAL RESISTANCE, JUNCTION-TO-CASE	$R_{\theta\text{-C}}$	4.0	4.0	4.0	4.0	$^\circ\text{C} /$ WATT TYP

NOTE:(1) ALL VALUES APPLY IN BOTH DIRECTIONS. \*INDICATE TYPE 1 OR TYPE 2.