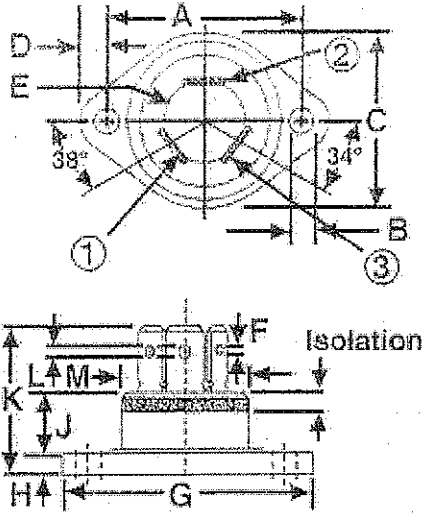


Terminal 1= CATHODE (0.250")
Terminal 2= ANODE (0.250")
Terminal 3= GATE (0.187")

TO-239 SCR



SYMBOL	INCHES	
A	1.182	1.192
B	0.150	0.161
C	0.975	1.025
D	0.175 REF.	
E	0.480	0.5
F	0.050 REF.	
G	1.507	1.567
H	0.119	0.131
J	-	0.4
K	0.900	0.96
L	0.070 REF.	
M	0.778	0.81

MAXIMUM RATINGS	SYMBOL	DEVICE NUMBERS		UNITS
Repetitive Peak Off-State Voltage	50	H3SF35	H3SF55	VOLT
Repetitive Peak Reverse Voltage	100	H3SA35	H3SA55	
Gate Open, and $T_J = 110^\circ\text{C}$, V_{DRM}	200	H3SB35	H3SB55	
	400	H3SD35	H3SD55	
	600	H3SM35	H3SM55	
RMS On-State Current at $T_C = 80^\circ\text{C}$ and Conduction Angle of 180°	$I_T(\text{RMS})$	35.0	55.0	AMP
Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60 Hz	I_{TSM}	350	550	AMP
Peak Gate-Trigger Current for $3\mu\text{sec}$. Max.	I_{GTM}	2	2	AMP
Peak Gate-Power Dissipation at $I_{GT} \leq I_{GTM}$	P_{GM}	20	20	WATT
Average Gate-Power Dissipation	$P_{G(AV)}$	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		$^\circ\text{C}$
Peak Off-State Current, Gate Open $T_C = 110^\circ\text{C}$ V_{DRM} & $V_{RRM} = \text{Max. Rating}$	I_{DRM} & I_{RRM}	1.0	2	mA MAX.
Maximum On-State Voltage (PEAK) at $T_C = 25^\circ\text{C}$ and $I_T = \text{Rated Amps}$	V_{TM}	1.5	1.6	VOLT MAX
DC Holding Current, Gate Open and $T_C = 25^\circ\text{C}$	I_{HO}	80	80	mA MAX.
Critical Rate-Of-Rise of Off-State Voltage, Gate Open, $T_C = 110^\circ\text{C}$	Critical dv/dt	200	200	$\text{V}/\mu\text{sec}$.
DC Gate-Trigger Voltage for $V_D = 12\text{VDC}$, $R_L = 60\text{ OHM}$ and at $T_C = 25^\circ\text{C}$	I_{GT}	80	80	$\text{V}/\mu\text{sec}$.
DC Gate - Trigger Voltage for Anode Voltage = 12VDC, $R_L = 60\Omega$ and at $T_C = 25^\circ\text{C}$	V_{GT}	2.0	2.0	mA MAX.
Gate Controlled Turn-On Time for $T_D + T_R$ $I_{GT} = 150\text{mA}$ and $T_C = 25^\circ\text{C}$	T_{gt}	2.5	2.5	VOLT MAX
Thermal Resistance, Junction-to-Case	$R_{\theta J-C}$	1.3	0.9	$^\circ\text{C}/\text{WATT TYP}$

Notes:

(1) All Hutson Isolated TO-239 SCR's are UL Recognized. UL number E95589(N).