



# HUTSON INDUSTRIES, INC.

## TO-218 ISOLATED\* SCR

MAXIMUM RATINGS	SYMBOL	VDRM	DEVICE NUMBERS			UNITS
Repetitive Peak Off-State Voltage (1) Gate open, and T <sub>j</sub> = 110° C	VDRM	50 100 200 400 600	HIS025 HIS125 HIS225 HIS425 HIS625	HIS040 HIS140 HIS240 HIS440 HIS640	HIS065 HIS165 HIS265 HIS465 HIS665	VOLT
RMS On-State Current at TC = 80° C and Conduction Angle of 360°	I <sub>t</sub> (RMS)		25	40	65	AMP
Peak Surge (Non-Repetitive) On-State Current, One-Cycle, at 50Hz or 60 Hz	ITSM		250	400	650	AMP
Peak Gate-Trigger Current for 3μsec. Max.	IGTM		5	5	5	AMP
Peak Gate-Power Dissipation at IGT ≤ IGTM	PGM		20	20	20	WATT
Average Gate-Power Dissipation	PG(AV)		0.5	0.5	0.5	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
<b>ELECTRICAL CHARACTERISTICS</b>						
<b>At Specified Case Temperatures</b>						
Peak Off-State Current, Gate Open TC = 110° C VDRM & VRRM = Max. Rating	IDRM		0.5	0.5	0.5	mA MAX.
Maximum On-State Voltage, (PEAK) at TC=25°C, and I <sub>T</sub> = Rated Amps	VTM		1.6	1.8	1.8	VOLT MAX
DC Holding Current, Gate Open and TC = 25°C	IHO		100	100	100	mA MAX.
Critical Rate-Of-Rise of Off-State Voltage, Gate Open, TC = 110°C	Critical dv/dt		200	200	200	V/μsec.
DC Gate – Trigger Current for Anode Voltage = 12VDC, R <sub>L</sub> = 60Ω and at TC = 25° C	IGT		40	40	50	mA MAX.
DC Gate-Trigger Voltage for Anode Voltage = 12VDC, R <sub>L</sub> = 60Ω and at TC = 25°C	VGT		2	2	2	VOLT MAX
Gate-Controlled Turn-on Time for t <sub>D</sub> + t <sub>R</sub> , IGT = 150mA and TC = 25°C	Tgt		2.5	2.5	2.5	μsec.
Thermal Resistance, Junction-to-Case	R <sub>θJ-C</sub>		1.1	0.95	1.0	°C/WATT TYP

\*All Hutson Isolated TO-218 devices are UL Recognized.  
UL number E95589 (N)

Note: Add "E" Suffix for Eyelet Leads

