

semitronics

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TO-92 Sensilive Gate SCR's

MAXIMUM RATINGS.	SYMBOL	V_{DRXM} and V_{RRM}	DEVICE NOS.	UNITS
	Repetitive Peak Off-State Voltage and Repetitive Peak Reverse Voltage at $T_C = 100^\circ\text{C}$	V_{DRXM} and V_{RRM}	30 60 100 200 400 600 800	S1Y S1YY S1A S1B S1D S1M S1N
RMS On-State Current	$I_{T(RMS)}$		0.8	AMP
Peak Surge (Non-Repetitive) On-State current, One Cycle at 50 or 60 Hz	I_{ISM}		8	AMP
Peak Gate-Trigger Current for 3 $\mu\text{sec.}$ Max.	I_{GTM}		0.5	AMP
Peak Gate-Power Dissipation at $I_{GT} \leq I_{GTM}$ for 3. $\mu\text{sec.}$ Max.	P_{GM}		20	WATT
Average Gate Power Dissipation	$P_{G(AV)}$		0.2	WATT
Storage Temperature Range	T_{STG}		-40 to +150	$^\circ\text{C}$
Operating Temperature Range	T_{OPER}		-40 to +100	$^\circ\text{C}$
ELECTRICAL CHARACTERISTICS At Specified Case Temperatures.	Peak-Off State Current at $T_C = 100^\circ\text{C}$. ($R_{GK} = 1\text{K}\Omega$) and V_{DRXM} and $V_{RRM} = \text{Max. Rating}$	I_{DRXM} and I_{RRM}	50 Max.	μA
	Maximum On-State Voltage at $T_C = 25^\circ\text{C}$ and $I_T = 1.2\text{ A}$ (Peak)	V_{TM}	1.70 Max.	VOLT
	DC Holding Current at $T_C = 25^\circ\text{C}$	I_{HO}	5 Max.	mA
	DC Gate-Trigger Current for $V_D = 6\text{ VDC}$; $R_L = 100\Omega$ and at $T_C = 25^\circ\text{C}$	I_{GT}	50 Typ. 200 Max. — Min.	μA
	DC Gate-Trigger Voltage for $V_D = 6\text{ VDC}$; $R_L = 100\Omega$ and at $T_C = 25^\circ\text{C}$	V_{GT}	0.8 Max.	VOLT
	PI for Fusing Reference ($> 1.5\text{ msec}$)	PI	0.15	A 2 sec.
	Critical Rate of Applied Forward Voltage at $T_C = 100^\circ\text{C}$	critical dv/dt	5 Typ.	V/ μsec .
	Thermal Resistance, Junction to Case	θ_{JC}	5 T_{VN}	$^\circ\text{C/WATT}$