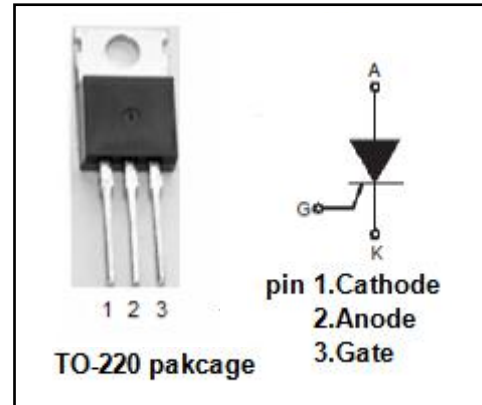


**isc Thyristors**
**S6012R**
**APPLICATIONS**

- With TO-220 package
- Highly sensitive triggering levels
- For capacitive discharge ignitions, motor control in kitchen aids, overvoltage crowbar protection in low power supplies applications.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


**ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}\text{C}$ )**

SYMBOL	PARAMETER		MIN	UNIT
$V_{DRM}$	Repetitive peak off-state voltage		600	V
$V_{RRM}$	Repetitive peak reverse voltage		600	V
$I_{T(RMS)}$	RMS on-state current		12	A
$I_{T(AV)}$	Average on-state current		7.6	A
$I_{TSM}$	Surge non-repetitive on-state current	50HZ	255	A
		60HZ	300	
$I_{T(AV)}$	On-state current 180° conduction angle		7.6	A
$I_{TSM}$	Non-repetitive surge peak on-state current $t=20\text{ms}$		12	A
$P_{G(AV)}$	Average gate power dissipation		0.5	W
$T_j$	Junction temperature		125	°C
$T_{stg}$	Storage temperature		-40 to + 150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>RM</sub> =V <sub>RPM</sub> , V <sub>DM</sub> =V <sub>DRM</sub> ,	T <sub>J</sub> =25°C		0.01	mA
I <sub>DRM</sub>	Repetitive peak off-state current		T <sub>J</sub> =100°C T <sub>J</sub> =125°C		0.5 1	
V <sub>TM</sub>	On-state voltage				1.6	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> =12V;RL=60 Ω ;			20	mA
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> =12V;RL=60 Ω ;			1.5	V

**NOTICE:**

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