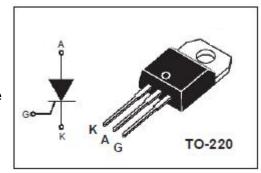


# isc Thyristors S6025L

#### **DESCRIPTION**

- · With TO-220 packaging
- · Electrically-isolated package
- High surge capability
- Glass passivated junctions and center gate fire for greater parameter uniformity and stability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



### **APPLICATIONS**

· Switching applications

## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER			UNIT
$V_{DRM}$	Repetitive peak off-state voltage	P 2	600	V
$V_{RRM}$	Repetitive peak reverse voltage		600	V
I <sub>T(RMS)</sub>	RMS on-state current		25	А
I <sub>TSM</sub>	Surge non-repetitive on-state current ( 1/2 cycle,sine wave;Tc=25℃ )		HZ 300 HZ 350	А
P <sub>G(AV)</sub>	Average gate power dissipation Tp=8.3ms		0.5	W
Tj	Operating junction temperature	7	-40~12	.5 °C
T <sub>stg</sub>	Storage temperature		-40~15	0 °C

## ELECTRICAL CHARACTERISTICS (Tc=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>RRM</sub>	T <sub>j</sub> =25℃		0.01	
$I_{DRM}$	Repetitive peak off-state current	V <sub>DM</sub> =V <sub>DRM</sub>	T <sub>j</sub> =100℃ T <sub>j</sub> =125℃		1.0 2.0	mA
$V_{TM}$	On-state voltage	I <sub>TM</sub> = 25A			1.6	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> = 12 V; RL=60 Ω			35	mA
$V_{GT}$	Gate-trigger voltage	V <sub>D</sub> = 12 V; RL=60 Ω			1.5	V
R <sub>th(j-c)</sub>	Thermal resistance	Junction to case			2.5	°C/W

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