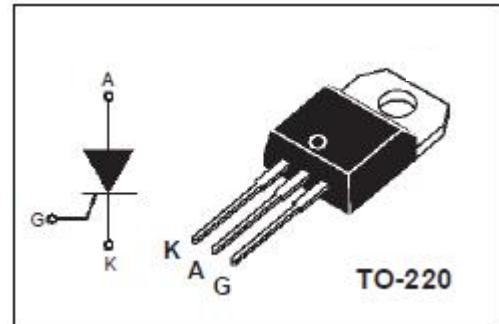


**isc Thyristors**
**S6025L**
**DESCRIPTION**

- 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( $T_a=25^{\circ}\text{C}$ )**

SYMBOL	PARAMETER		MIN	UNIT
$V_{\text{DRM}}$	Repetitive peak off-state voltage		600	V
$V_{\text{RRM}}$	Repetitive peak reverse voltage		600	V
$I_{\text{T(RMS)}}$	RMS on-state current		25	A
$I_{\text{TSM}}$	Surge non-repetitive on-state current ( 1/2 cycle,sine wave; $T_c=25^{\circ}\text{C}$ )	50HZ 60HZ	300 350	A
$P_{\text{G(AV)}}$	Average gate power dissipation	$T_p=8.3\text{ms}$	0.5	W
$T_j$	Operating junction temperature		-40~125	$^{\circ}\text{C}$
$T_{\text{stg}}$	Storage temperature		-40~150	$^{\circ}\text{C}$

**ELECTRICAL CHARACTERISTICS ( $T_c=25^{\circ}\text{C}$  unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
$I_{\text{RRM}}$	Repetitive peak reverse current	$V_{\text{RM}}=V_{\text{RRM}}$ $V_{\text{DM}}=V_{\text{DRM}}$	$T_j=25^{\circ}\text{C}$		0.01	mA
$I_{\text{DRM}}$	Repetitive peak off-state current		$T_j=100^{\circ}\text{C}$		1.0	
			$T_j=125^{\circ}\text{C}$		2.0	
$V_{\text{TM}}$	On-state voltage	$I_{\text{TM}}= 25\text{A}$			1.6	V
$I_{\text{GT}}$	Gate-trigger current	$V_{\text{D}} = 12 \text{ V}; R_{\text{L}}=60 \Omega$			35	mA
$V_{\text{GT}}$	Gate-trigger voltage	$V_{\text{D}} = 12 \text{ V}; R_{\text{L}}=60 \Omega$			1.5	V
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case			2.5	$^{\circ}\text{C/W}$

**NOTICE:**

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