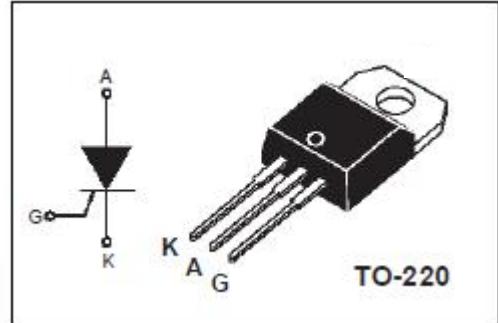


isc Thyristors

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($T_a=25^\circ C$)

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	25	A	
I_{TSM}	Surge non-repetitive on-state current (1/2 cycle,sine wave; $T_c=25^\circ C$)	50HZ 60HZ	300 350	A
$P_{G(AV)}$	Average gate power dissipation $T_p=8.3ms$	0.5	W	
T_j	Operating junction temperature	-40~125	°C	
T_{stg}	Storage temperature	-40~150	°C	

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ C$ unless otherwise specified)

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