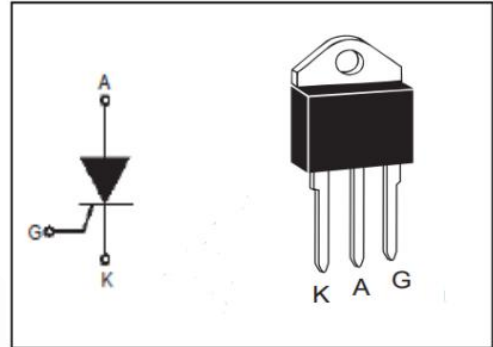


isc Thyristors

S6065J

DESCRIPTION

- With TO-218 isolated 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_{DRM}	Repetitive peak off-state voltage		600	V
V_{RRM}	Repetitive peak reverse voltage		600	V
$I_{T(RMS)}$	RMS on-state current		65	A
I_{TSM}	Surge non-repetitive on-state current (1/2 cycle, sine wave; $T_c=25^\circ\text{C}$)	50HZ	950	A
		60HZ	800	
$P_{G(AV)}$	Average gate power dissipation	$T_p=8.3\text{ms}$	1	W
T_j	Operating junction temperature		-40~125	$^\circ\text{C}$
T_{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_{RRM}	Repetitive peak reverse current	$V_{RM}=V_{RRM}$ $V_{DM}=V_{DRM}$	$T_j=25^\circ\text{C}$		0.02	mA
I_{DRM}	Repetitive peak off-state current		$T_j=100^\circ\text{C}$		1.5	
			$T_j=125^\circ\text{C}$		3	
V_{TM}	On-state voltage	$I_{TM}=65\text{A}$			1.8	V
I_{GT}	Gate-trigger current	$V_D = 12\text{ V}; R_L=30\ \Omega$			50	mA
V_{GT}	Gate-trigger voltage	$V_D = 12\text{ V}; R_L=30\ \Omega$			2.0	V
$R_{th(j-c)}$	Thermal resistance	Junction to case			0.86	$^\circ\text{C}/\text{W}$

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