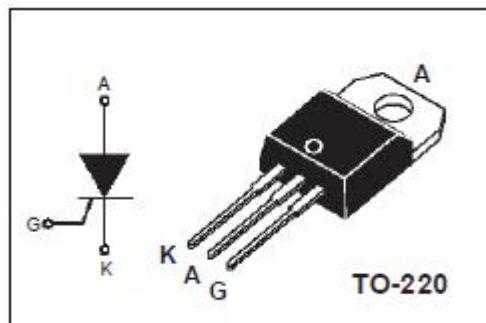


isc Thyristors

S4025R

APPLICATIONS

- With TO-220 package
- It is suitable to fit all modes of control found in applications such as overvoltage crowbar protection, motor control circuits in power tools and kitchen aids, in-rush current limiting circuits, capacitive discharge ignition, voltage regulation circuits etc.
- 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		400	V
V_{RRM}	Repetitive peak reverse voltage		400	V
$I_{\text{T(RMS)}}$	RMS on-state current		25	A
$I_{\text{T (AV)}}$	Average on-state current		16	A
I_{TSM}	Surge non-repetitive on-state current	50HZ	300	A
		60HZ	350	
T_j	Operating junction temperature		-40~125	$^{\circ}\text{C}$
T_{stg}	Storage temperature		-40~125	$^{\circ}\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_R=V_{\text{RRM}}$ Rated; $V_D=V_{\text{DRM}}$ Rated;	$T_c=25^{\circ}\text{C}$		0.01	mA
I_{DRM}	Repetitive peak off-state current		$T_c=100^{\circ}\text{C}$		1	
			$T_c=125^{\circ}\text{C}$		2	
V_{TM}	On-state voltage				1.6	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}; R_L=60\ \Omega$;			35	mA
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}; R_L=60\ \Omega$;			1.5	V

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