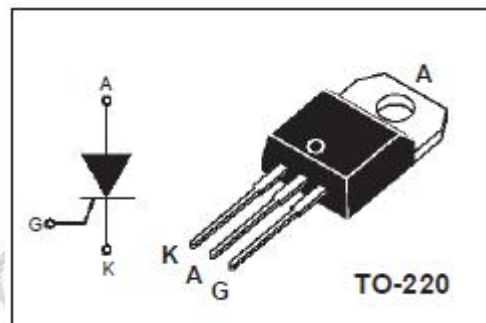


isc Thyristors

S6025R

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	600	V	
V_{RRM}	Repetitive peak reverse voltage	600	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	$V_{\text{R}}=V_{\text{RRM}}$ Rated; $V_{\text{D}}=V_{\text{DRM}}$ Rated; $T_c=25^{\circ}\text{C}$ $T_c=100^{\circ}\text{C}$ $T_c=125^{\circ}\text{C}$		0.01	mA
I_{DRM}	Repetitive peak off-state current		1	2	
V_{TM}	On-state voltage			1.6	V
I_{GT}	Gate-trigger current	$V_{\text{D}}=12\text{V}; R_{\text{L}}=60\ \Omega$;		35	mA
V_{GT}	Gate-trigger voltage	$V_{\text{D}}=12\text{V}; R_{\text{L}}=60\ \Omega$;		1.5	V