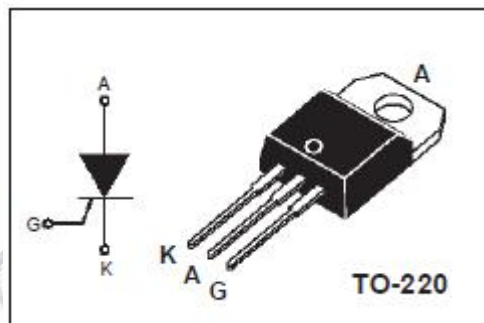


## isc Thyristors

## S6020L

## APPLICATIONS

- With TO-220ins 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	
$V_{\text{DRM}}$	Repetitive peak off-state voltage	600	V	
$V_{\text{RRM}}$	Repetitive peak reverse voltage	600	V	
$I_{\text{T(RMS)}}$	RMS on-state current	20	A	
$I_{\text{T (AV)}}$	Average on-state current	12.8	A	
$I_{\text{TSM}}$	Surge non-repetitive on-state current	50HZ	255	A
		60HZ	300	
$T_j$	Operating junction temperature	-40~125	$^{\circ}\text{C}$	
$T_{\text{stg}}$	Storage temperature	-40~125	$^{\circ}\text{C}$	

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$I_{\text{RRM}}$	Repetitive peak reverse current	$V_R=V_{\text{RRM}}$ Rated; $V_D=V_{\text{DRM}}$ Rated;		0.01	mA
$I_{\text{DRM}}$	Repetitive peak off-state current				
$V_{\text{TM}}$	On-state voltage			1.6	V
$I_{\text{GT}}$	Gate-trigger current	$V_D=12\text{V}; R_L=60\ \Omega$ ;		30	mA
$V_{\text{GT}}$	Gate-trigger voltage	$V_D=12\text{V}; R_L=60\ \Omega$ ;		1.5	V