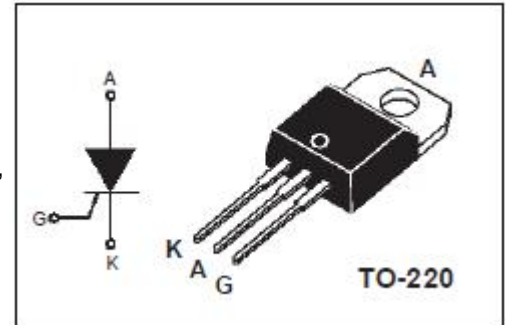


isc Thyristors

SK055R

APPLICATIONS

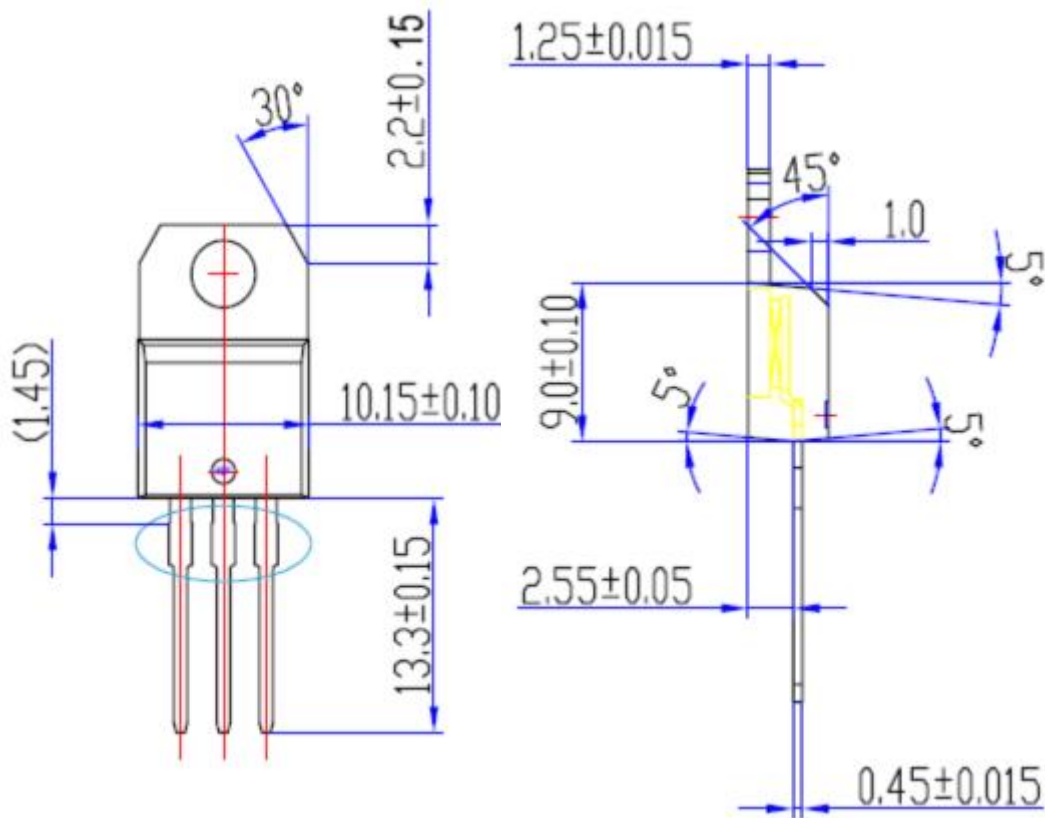
- It is suitable to fit all modes of control found in applications such as overvoltage crowbar protection, motor control circuits in power tools and kitchen aids, in-rush current limiting circuits, capacitive discharge ignition, voltage regulation circuits etc.
- Minimum Lot-to-Lot variations for robust 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	1000	V
V_{RRM}	Repetitive peak reverse voltage	1000	V
$I_{\text{T(AV)}}$	Average on-state current	35	A
$I_{\text{T(RMS)}}$	RMS on-state current	55	A
$P_{\text{G(AV)}}$	Average gate power dissipation	1.0	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	$V_{\text{RM}}=V_{\text{RRM}}$	$T_j=25^{\circ}\text{C}$	30	μA
			$T_j=100^{\circ}\text{C}$	5.0	mA
I_{DRM}	Repetitive peak off-state current	$V_{\text{DM}}=V_{\text{DRM}}$	$T_j=25^{\circ}\text{C}$	30	μA
			$T_j=100^{\circ}\text{C}$	5.0	mA
V_{TM}	On-state voltage	$I_{\text{TM}}=25\text{A}$		1.8	V
I_{GT}	Gate-trigger current	$V_{\text{D}}=12\text{V}; I_{\text{T}}=0.1\text{A}$	5.0	40	mA
V_{GT}	Gate-trigger voltage	$V_{\text{D}}=12\text{V}; I_{\text{T}}=0.1\text{A}$		1.5	V
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case		0.6	$^{\circ}\text{C/W}$



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