

isc Thyristors

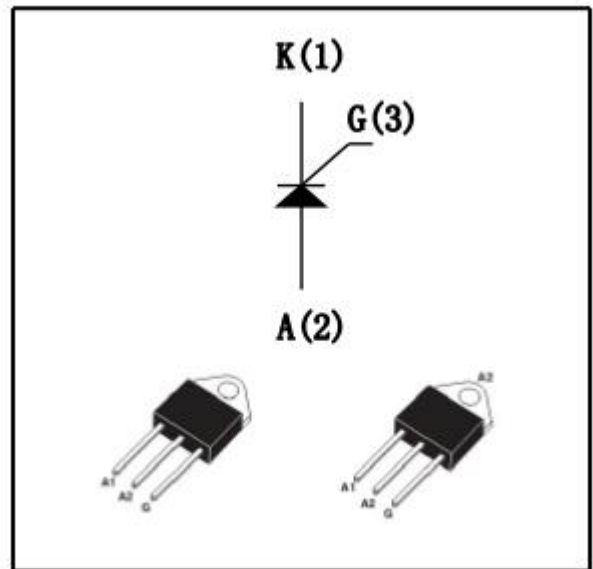
BCA55

DESCRIPTION

Excellent unidirectional switches for phase control applications such as heating and motor speed controls. Standard phase control SCRs are triggered with few milliamperes of current at less than 1.5V potential

APPLICATIONS

Typical applications are AC solid-state switches, industrial power tools, exercise equipment, white goods and commercial appliances

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
$I_{\text{T(AV)}}$	Average on-state current, $T_C=75^\circ\text{C}$	41	A
$I_{\text{T(RMS)}}$	RMS on-state current, $T_C=75^\circ\text{C}$	65	A
I_{TSM}	Surge non-repetitive on-state current	800	A
$P_{\text{G(AV)}}$	Average gate power dissipation, $T_J = 125^\circ\text{C}$	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	$V_{\text{RM}}=V_{\text{RRM}}$, $V_{\text{RM}}=V_{\text{RRM}}$, $T_J=125^\circ\text{C}$		0.02 3	mA
I_{DRM}	Repetitive peak off-state current	$V_{\text{DM}}=V_{\text{DRM}}$, $V_{\text{DM}}=V_{\text{DRM}}$, $T_J=125^\circ\text{C}$		0.02 3	mA
V_{TM}	On-state voltage	$I_{\text{TM}}= 130\text{A}$		1.8	V
I_{GT}	Gate-trigger current	$V_{\text{D}}= 12\text{V}$; $R_{\text{L}}=30\ \Omega$	5	50	mA
V_{GT}	Gate-trigger voltage	$V_{\text{D}}= 12\text{V}$; $R_{\text{L}}=30\ \Omega$		2.0	V
I_{H}	Holding current	$I_{\text{T}}= 0.4\text{A}$, Gate Open		80	mA
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case		0.86	$^\circ\text{C}/\text{W}$

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●TO-3P 外形尺寸图

