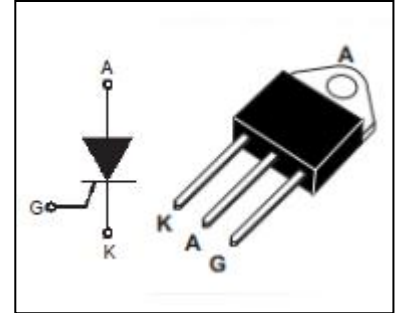


isc Thyristors

BTW69-1200

APPLICATIONS

- Available in high power packages, BTW69 Series is suitable in applications where power handling and power dissipation are critical, such as solid state relays, welding equipment, high power motor
- 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	1200	V
V_{RRM}	Repetitive peak reverse voltage	1200	V
$I_{\text{T(AV)}}$	Average on-state current, $T_c=70^{\circ}\text{C}$	31	A
$I_{\text{T(RMS)}}$	RMS on-state current $T_c=70^{\circ}\text{C}$	50	A
I_{TSM}	Surge non-repetitive on-state current $T_P=10\text{ms}$	500	A
$P_{\text{G(AV)}}$	Average gate power dissipation	1	W
T_j	Operating junction temperature	$-40\sim 125$	$^{\circ}\text{C}$
T_{stg}	Storage temperature	$-40\sim 150$	$^{\circ}\text{C}$

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_{\text{RM}}=V_{\text{RRM}}$		10	μA
				5	mA
I_{DRM}	Repetitive peak off-state current	$V_{\text{DM}}=V_{\text{DRM}}$		10	μA
				5	mA
V_{TM}	On-state voltage	$I_{\text{TM}}=100\text{A}$		1.6	V
I_{GT}	Gate-trigger current	$V_{\text{D}}=12\text{V}; R_{\text{L}}=33\Omega$		50	mA
V_{GT}	Gate-trigger voltage	$V_{\text{D}}=12\text{V}; R_{\text{L}}=33\Omega$		1.3	V
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case		0.45	$^{\circ}\text{C/W}$