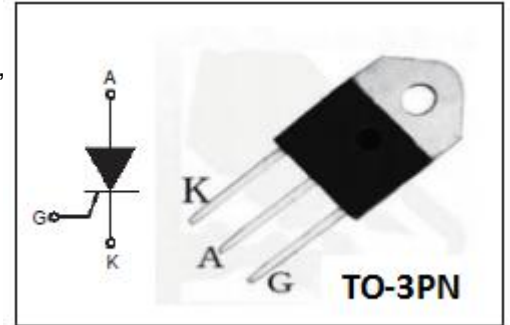


isc Thyristors

BTW69-1000

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	1000	V
V_{RRM}	Repetitive peak reverse voltage	1000	V
$I_{\text{T(AV)}}$	Average on-state current, $T_c=70^\circ\text{C}$	32	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	-40~125	$^\circ\text{C}$
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	$V_{\text{RM}}=V_{\text{RRM}},$	$T_j=25^\circ\text{C}$	10	μA
			$T_j=125^\circ\text{C}$	5	mA
I_{DRM}	Repetitive peak off-state current	$V_{\text{DM}}=V_{\text{DRM}},$	$T_j=25^\circ\text{C}$	10	μA
			$T_j=125^\circ\text{C}$	5	mA
V_{TM}	On-state voltage	$I_{\text{TM}}=100\text{A}$		1.75	V
I_{GT}	Gate-trigger current	$V_D=12\text{V}, R_I=33\Omega$		80	mA
V_{GT}	Gate-trigger voltage	$V_D=12\text{V}, R_I=33\Omega$		1.3	V
$R_{\text{th(j-c)}}$	Thermal resistance	Junction to case		0.9	$^\circ\text{C/W}$

isc Thyristors

BTW69-1000

NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.