

## isc Thyristors

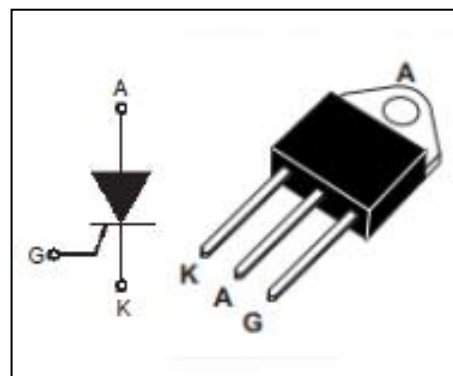
## BTW69-600RG

## DESCRIPTION

- With TO-3P packaging
- High commutation capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Switching applications
- Battery charging system
- Uninterruptible power supply
- Variable speed motor drive
- Industrial welding systems
- By pass AC switch

ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}\text{C}$ )

SYMBOL	PARAMETER		MAX	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage		600	V
V <sub>RRM</sub>	Repetitive peak reverse voltage		600	V
I <sub>T(RSM)</sub>	Average on-state current @Tc=75℃		50	A
I <sub>TSM</sub>	Surge non-repetitive on-state current	50Hz 60Hz	580 610	A
P <sub>G(AV)</sub>	Average gate power dissipation ( over any 20 ms period ) @Tc=125℃		1	W
T <sub>j</sub>	Operating junction temperature		-40~125	℃
T <sub>stg</sub>	Storage temperature		-40~150	℃

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; $T_j=25^{\circ}\text{C}$ $T_j=125^{\circ}\text{C}$		10	$\mu\text{A}$
$I_{\text{DRM}}$	Repetitive peak off-state current			5	mA
$V_{\text{TM}}$	On-state voltage	$I_T=100\text{A}; t_p=380\mu\text{s}$		1.9	V
$I_{\text{GT}}$	Gate-trigger current	$V_D=12\text{V}; R_L=33\Omega$		80	mA
$V_{\text{GT}}$	Gate-trigger voltage	$V_D=12\text{V}; R_L=33\Omega$		1.3	V
$R_{\text{th (j-c)}}$	Junction to case	For AC		0.9	$^{\circ}\text{C/W}$

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