

# isc Thyristors

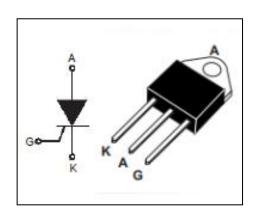
BTW69-700RG

#### **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(Ta=25℃)

SYMBOL	PARAMETER		MAX	UNIT
$V_{DRM}$	Repetitive peak off-state voltage			V
V <sub>RRM</sub>	Repetitive peak reverse voltage			V
I <sub>T(RSM)</sub>	Average on-state current @Tc=75°C		50	Α
I <sub>TSM</sub>	Surge non-repetitive on-state current 50Hz 60Hz		580 610	Α
P <sub>G(AV)</sub>	Average gate power dissipation ( over any 20 ms period ) @Tc=125°C			W
Tj	Operating junction temperature			$^{\circ}$
T <sub>stg</sub>	Storage temperature		-40~150	$^{\circ}\mathbb{C}$

## **ELECTRICAL CHARACTERISTICS (Tc=25℃ unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS		MIN	MAX	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>R</sub> =V <sub>RRM</sub> Rated;	Tj=25℃		10	μ <b>Α</b>
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>D</sub> =V <sub>DRM</sub> Rated;	Tj=125℃		5	mA
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> =100A;t <sub>P</sub> =380 μ s			1.9	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> =12V;R <sub>L</sub> =33 Ω			80	mA
$V_{GT}$	Gate-trigger voltage	V <sub>D</sub> =12V;R <sub>L</sub> =33 Ω			1.3	V
Rth (j-c)	Junction to case	For AC			0.9	°C/W



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