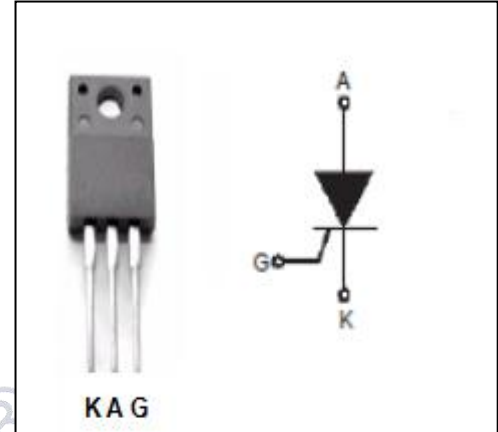


**isc Thyristors**
**BT152X-600R**
**DESCRIPTION**

- With TO-220F packaging
- Long-term stability
- Thyristor for line frequency
- Planar passivated chip
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching applications
- Line rectifying 50/60 Hz


**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	MIN	UNIT	
V <sub>DRM</sub>	Repetitive peak off-state voltage	650	V	
V <sub>RRM</sub>	Repetitive peak reverse voltage	650	V	
I <sub>T(AV)</sub>	Average forward current T <sub>c</sub> =40°C	13	A	
I <sub>T(RMS)</sub>	RMS on-state current	20	A	
I <sub>TSM</sub>	Surge non-repetitive on-state current ( 1/2 cycle, sine wave; T <sub>c</sub> =45°C )	50HZ	200	A
		60HZ	220	A
P <sub>G(AV)</sub>	Average gate power dissipation	0.5	W	
T <sub>j</sub>	Operating junction temperature	-40~125	°C	
T <sub>stg</sub>	Storage temperature	-40~150	°C	

**ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I <sub>RRM</sub>	Repetitive peak reverse current	V <sub>RM</sub> =V <sub>RRM</sub> V <sub>DM</sub> =V <sub>DRM</sub> T <sub>j</sub> =125°C		1.0	mA
I <sub>DRM</sub>	Repetitive peak off-state current				
V <sub>TM</sub>	On-state voltage	I <sub>TM</sub> = 40A		1.75	V
I <sub>GT</sub>	Gate-trigger current	V <sub>D</sub> = 12V; I <sub>T</sub> =0.1A		32	mA
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> = 12V; I <sub>T</sub> =0.1A		1.5	V
R <sub>th(j-c)</sub>	Thermal resistance	Junction to case		4.0	°C/W



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