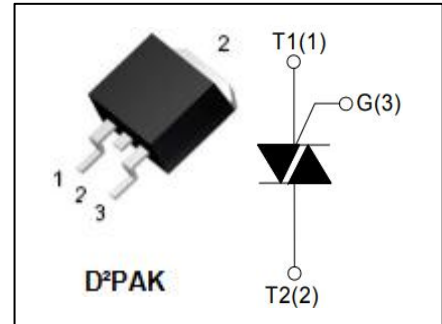


**isc Thyristors**
**BT152B series**
**APPLICATIONS**

- It is suitable to fit all modes of control found in applications such as overvoltage crowbar protection, motor control circuits in power tools and kitchen aids, in-rush current limiting circuits, capacitive discharge ignition, voltage regulation circuits etc.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


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

SYMBOL	PARAMETER	MIN	UNIT	
V <sub>DRM</sub>	Repetitive peak off-state voltage	400R	V	
		600R		
		800R		
I <sub>T(AV)</sub>	Average on-state current	13	A	
I <sub>T(RMS)</sub>	RMS on-state current	20	A	
I <sub>TSM</sub>	Surge non-repetitive on-state current	T <sub>P</sub> =10ms	200	A
P <sub>G(AV)</sub>	Average gate power dissipation	over any 20 ms period	1.1	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> , R <sub>GK</sub> = 220 Ω, T <sub>j</sub> =125°C		5	μA
				2	mA
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>DM</sub> =V <sub>DRM</sub> , R <sub>GK</sub> = 220 Ω		5	μA
				2	mA
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> = 12 V; I <sub>T</sub> = 0.1 A		32	mA
V <sub>GT</sub>	Gate-trigger voltage	V <sub>D</sub> = 12 V; I <sub>T</sub> = 0.1 A		1.5	V
R <sub>th(j-c)</sub>	Thermal resistance	Junction to case		1.3	°C/W

**NOTICE:**

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