

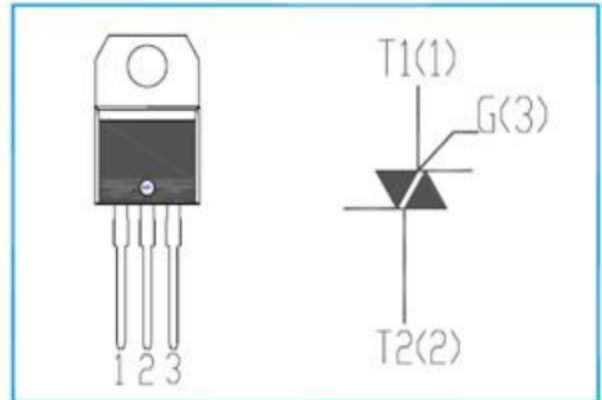


## isc Triacs

## BT138

## FEATURES

- With TO-220 package
- Glass passivated triacs in a plastic envelope, Intended for use in general purpose bidirectional switching and phase control applications, where high sensitivity is required in all our quadrants.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	MIN	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	800	V
V <sub>RRM</sub>	Repetitive peak off-state voltage	800	V
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave)	12	A
I <sub>TSM</sub>	Non-repetitive peak on-state current	95	A
P <sub>GM</sub>	Peak gate power dissipation	5	W
P <sub>G(AV)</sub>	Average gate power dissipation	0.5	W
T <sub>j</sub>	Operating junction temperature	125	°C
T <sub>stg</sub>	Storage temperature	-45~150	°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>R</sub> =V <sub>RRM</sub> , V <sub>R</sub> =V <sub>RRM</sub> , T <sub>j</sub> =125°C		0.02 0.5	mA	
I <sub>DRM</sub>	Repetitive peak off-state current	V <sub>D</sub> =V <sub>DRM</sub> , V <sub>D</sub> =V <sub>DRM</sub> , T <sub>j</sub> =125°C		0.02 0.5	mA	
I <sub>GT</sub>	Gate trigger current	V <sub>D</sub> =12V; I <sub>T</sub> = 0.1A, R <sub>L</sub> = 30 Ω		I	30	mA
				II	30	
				III	30	
				IV	70	
V <sub>TM</sub>	On-state voltage	I <sub>T</sub> = 15A		1.65	V	
I <sub>H</sub>	Holding current	I <sub>GT</sub> = 0.1A, V <sub>D</sub> = 12V		60	mA	
V <sub>GT</sub>	Gate trigger voltage	V <sub>D</sub> =12V; R <sub>L</sub> = 30 Ω all quadrant		1.5	V	