T1(1)

T2(5)



## BT139-500

G(3)

#### FEATURES

- With TO-220 package
- Glass passivated triacs in a plastic envelope, for use in applications requiring high bidirectional transient and blocking voltage capability and high thermal cycling performance.Typical applications include motor control, industrial and Domestic lighting,heating and static switching.

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	MIN	UNIT	
V <sub>DRM</sub>	Repetitive peak off-state voltage	500	V	
V <sub>RRM</sub>	Repetitive peak off-state voltage	500	V	
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave)	16	A	
I <sub>TSM</sub>	Non-repetitive peak on-state current tp=20ms	140	A	
Р <sub>GM</sub>	Peak gate power dissipation	5	W	
P <sub>G(AV)</sub>	Average gate power dissipation	0.5	W	
Tj	Operating junction temperature 125		°C	
T <sub>stg</sub>	Storage temperature	-40~150		

### ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25 $^{\circ}$ 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> , Tj=125℃		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> , Тј=125 ℃		0.02 0.5	mA
I <sub>GT</sub>	Gate trigger current	Ι	- V <sub>D</sub> =12V; I <sub>T</sub> = 0.1A		50	
		II			50	
		III			50	- mA
		IV			100	
V <sub>TM</sub>	On-state voltage		I <sub>T</sub> = 20A		1.6	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; I <sub>T</sub> = 0.1A		1.5	V

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## isc Triacs

# BT139-500

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