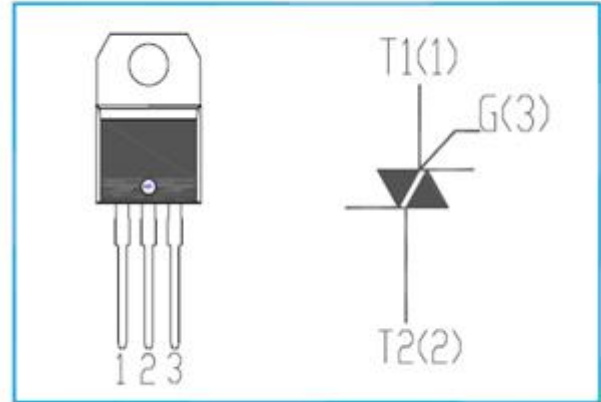


isc Triacs

BT139-800

**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.
- 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)	16	A
I <sub>TSM</sub>	Non-repetitive peak on-state current t <sub>p</sub> =20ms	140	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	-40~150	°C

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT	
I <sub>R</sub> RM	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>D</sub> RM	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		I	50	mA
				II	50	
				III	50	
				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	