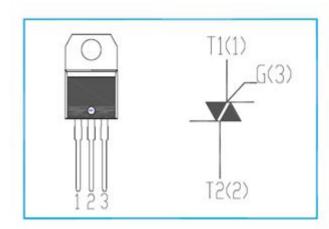


isc Triacs BT137-500E

## **FEATURES**

- With TO-220 package
- Glass passivated triacs in a plasticenvelope, for use in general purposebidirectional switching and phase control applications, which are intended to be interfaced directly to microcontrollers, logic integrated circuits and other low power gate trigger circuits.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



## ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	MIN	UNIT
V <sub>DRM</sub>	Repetitive peak off-state voltage	500	V
$V_{RRM}$	Repetitive peak off-state voltage	500	V
I <sub>T(RMS)</sub>	RMS on-state current (full sine wave)	8	Α
I <sub>TSM</sub>	Non-repetitive peak on-state current	65	Α
P <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	110	$^{\circ}$ C
T <sub>stg</sub>	Storage temperature	-45~150	$^{\circ}$

## **ELECTRICAL CHARACTERISTICS (Tc=25℃ unless otherwise specified)**

2220 Track 2 of Francis (16 20 of amost carefulous operation)										
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=110°C		0.02 0.5	mA				
I <sub>DRM</sub>	Repetitive peak off-sta	te current	V <sub>D</sub> =V <sub>DRM</sub> , V <sub>D</sub> =V <sub>DRM</sub> , Tj=110 °C		0.02 0.5	mA				
l <sub>GT</sub>		I	- V <sub>D</sub> =12V; I <sub>T</sub> = 0.1A, R <sub>L</sub> = 30 Ω		10					
	Gate trigger current	II			10	A				
		III			10	mA				
		IV			25					
V <sub>TM</sub>	On-state voltage		I <sub>T</sub> = 10A		1.65	V				
I <sub>H</sub>	Holding current		I <sub>GT</sub> = 0.1A, V <sub>D</sub> = 12V		25	mA				
V <sub>GT</sub>	Gate trigger voltage		V <sub>D</sub> =12V; R <sub>L</sub> = 30 Ω all quadrant		1.5	V				



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