

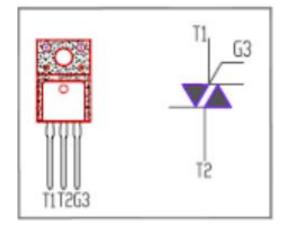


# isc Triacs

## BT137X-600D

### FEATURES

- With TO-220F 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°C)

SYMBOL	PARAMETER	MIN	UNIT	
V <sub>DRM</sub>	Repetitive peak off-state voltage	600	V	
V <sub>RRM</sub>	Repetitive peak off-state voltage	600	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	
$P_{GM}$	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	-45~150	°C	

#### 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=110℃		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> , Tj=110 ℃		0.02 0.5	mA
I <sub>GT</sub>	Gate trigger current II III IV			5		
		II	- V <sub>D</sub> =12V; I <sub>T</sub> = 0.1A, R <sub>L</sub> = 30 Ω		5	
		III			5	- mA
		IV			10	
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		10	mA
V <sub>GT</sub>	Gate trigger voltage		$V_D$ =12V; R <sub>L</sub> = 30 $\Omega$ all quadrant		1.5	V

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<sup>1</sup> *isc & iscsemi* is registered trademark





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