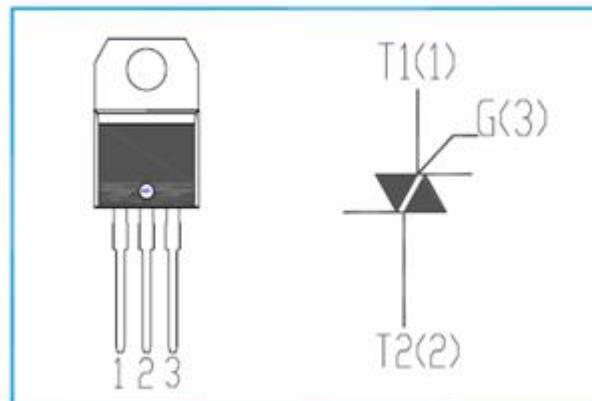


isc Triacs

BT137-500E

FEATURES

- With TO-220 package
- Glass passivated triacs in a plastic envelope, for use in general purpose bidirectional 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 _{DRM}	Repetitive peak off-state voltage	500	V
V _{RRM}	Repetitive peak off-state voltage	500	V
I _{T(RMS)}	RMS on-state current (full sine wave)	8	A
I _{TSM}	Non-repetitive peak on-state current	65	A
P _{GM}	Peak gate power dissipation	5	W
P _{G(AV)}	Average gate power dissipation	0.5	W
T _j	Operating junction temperature	110	°C
T _{stg}	Storage temperature	-45~150	°C

ELECTRICAL CHARACTERISTICS (T_c=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT	
I _{R(RM)}	Repetitive peak reverse current	V _R =V _{RRM} , V _R =V _{RRM} , T _j =110°C		0.02 0.5	mA	
I _{DRM}	Repetitive peak off-state current	V _D =V _{DRM} , V _D =V _{DRM} , T _j =110°C		0.02 0.5	mA	
I _{GT}	Gate trigger current	V _D =12V; I _T = 0.1A, R _L = 30 Ω		I	10	mA
				II	10	
				III	10	
				IV	25	
V _{TM}	On-state voltage	I _T = 10A		1.65	V	
I _H	Holding current	I _{GT} = 0.1A, V _D = 12V		25	mA	
V _{GT}	Gate trigger voltage	V _D =12V; R _L = 30 Ω all quadrant		1.5	V	