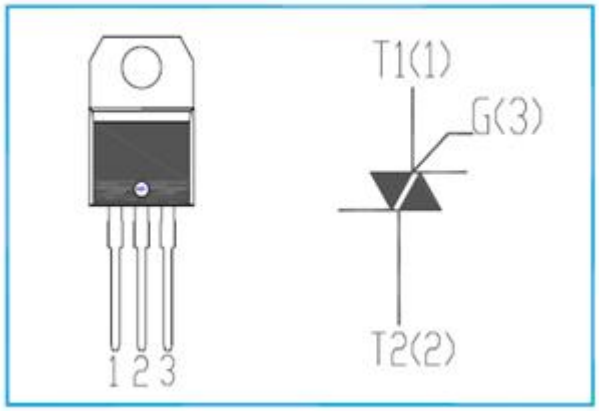
isc Triacs BT138

FEATURES

- With TO-220 package
- Glass passivated triacs in a plastic envelope, Intended for use in general purpose bidirectional switching and phase control applications, where high sensitivity is required in all our quadrants.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	MIN	UNIT
V_{DRM}	Repetitive peak off-state voltage	800	V
V_{RRM}	Repetitive peak off-state voltage	800	V
$I_{T(RMS)}$	RMS on-state current (full sine wave)	12	A
I_{TSM}	Non-repetitive peak on-state current	95	A
P_{GM}	Peak gate power dissipation	5	W
$P_{G(AV)}$	Average gate power dissipation	0.5	W
T_j	Operating junction temperature	125	℃
T_{stg}	Storage temperature	-45~150	℃

ELECTRICAL CHARACTERISTICS (T_C=25℃ unless otherwise specified)

SYMBOL	PARAMETER		CONDITIONS	MIN	MAX	UNIT
I_{RRM}	Repetitive peak reverse current		$V_R=V_{RRM}$, $V_R=V_{RRM}$, Tj=125℃		0.02 0.5	mA
I_{DRM}	Repetitive peak off-state current		$V_D=V_{DRM}$, $V_D=V_{DRM}$, Tj=125℃		0.02 0.5	mA
I_{GT}	Gate trigger current	I	V_D=12V; I_T= 0.1A, R_L= 30Ω		30	mA
		II			30	
		III			30	
		IV			70	
V_{TM}	On-state voltage		I_T= 15A		1.65	V
I_H	Holding current		I_{GT}= 0.1A, V_D= 12V		60	mA
V_{GT}	Gate trigger voltage		V_D=12V; R_L= 30Ω all quadrant		1.5	V

NOTICE：

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.