



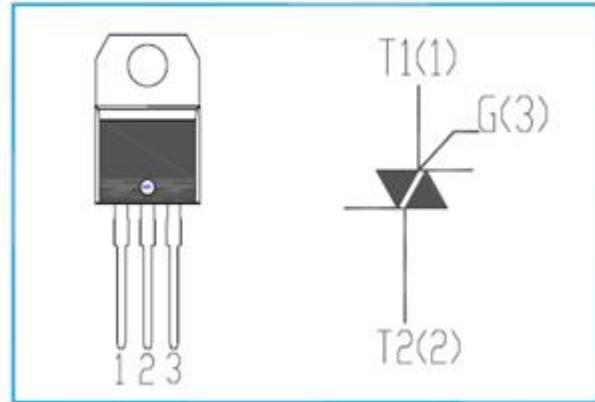
INCHANGE Semiconductor

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°C)

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	°C
T _{stg}	Storage temperature	-45~150	°C

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I _{RRM}	Repetitive peak reverse current	V _R =V _{RRM} , V _R =V _{RRM} , T _j =125°C	0.02 0.5		mA
I _{DRM}	Repetitive peak off-state current	V _D =V _{DRM} , V _D =V _{DRM} , T _j =125°C	0.02 0.5		mA
I _{GT}	Gate trigger current	I	V _D =12V; I _T = 0.1A, R _L = 30 Ω	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 = 30 Ω all quadrant		1.5	V