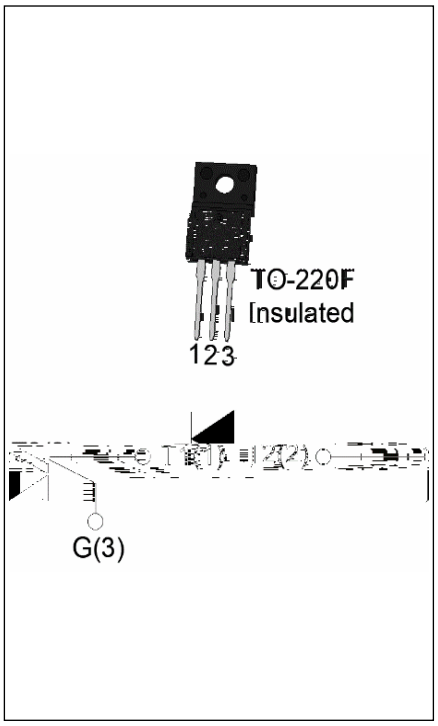
JST12F-800B 12A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST12F-800B triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. By using an external plastic package, JST12F-800B provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.



MAIN FEATURES

$I_{T(RMS)}$	12	A
V_{DRM}/V_{RRM}	800	V
I_{GT} / / /	50/50/50/70	mA

ABSOLUTE MAXIMUM RATINGS

Parameter		Symbol	Value	Unit
Storage junction temperature range		T_{stg}	-40-150	
Operating junction temperature range		T_j	-40-125	
Repetitive peak off-state voltage (T_j=25)		V_{DRM}	800	V
Repetitive peak reverse voltage (T_j=25)		V_{RRM}	800	V
RMS on-state current (T_C 085)		$I_{T(RMS)}$	12	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)		I_{TSM}	120	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)			132	
I^2t value for fusing (t_p=10ms , T_j=25)		I^2t	72	A^2s
Critical rate of rise of on-state current (I_G=2 hI GT , f=100Hz , T_j=125)	-	dI/dt	100	A/µs
	-		5 0	
Peak gate current (t_p=20µs , T_j=125)		I_{GM}	4	A
Average gate power dissipation (T_j=125)		$P_{G(AV)}$	0.5	W
Peak gate power		P_{GM}	10	W

S

Peak pulse voltage
(T_j=25

FIG.1: Maximum power dissipation versus RMS on-state current

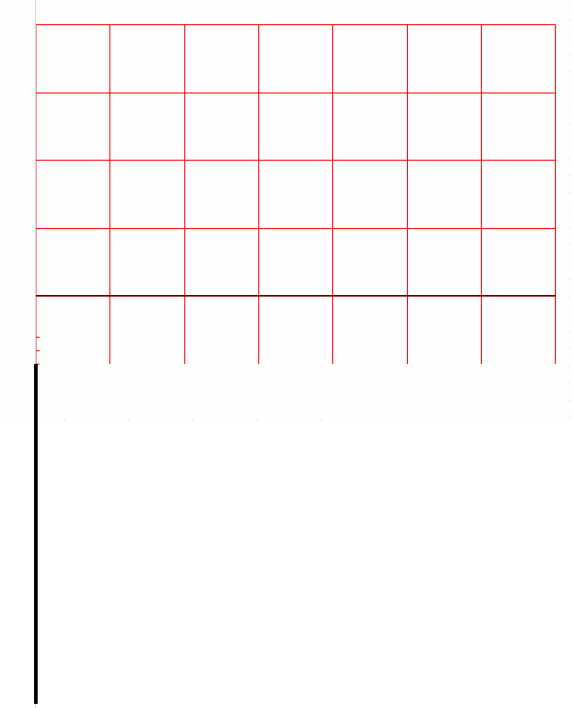
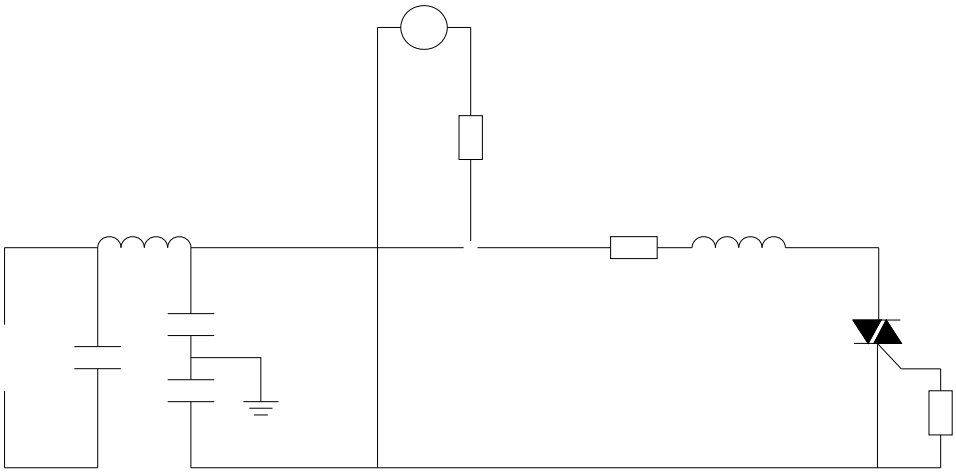


FIG.2: RMS on-state current versus case temperature X—Ó€ 4 T Ü P!YfP • ` }8 0 ? S• 4 T

FIG.7 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards



PACKAGE MECHANICAL DATA



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