



JST10F-600BW 10A TRIAC

Rev.A.1.1

The JST10F-600BW 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. JST10F-600BW snubberless triac is especially recommended for use on inductive loads. By using an external plastic package, JST10F-600BW provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.

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 ($T_j=25^\circ\text{C}$) V



Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.7)	V_{pp}	4.5	kV

(T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33\Omega$	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k\Omega$	- -	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	-	MAX.	70	mA
				90	
I_H	$I_T=500mA$		MAX.	60	mA
dV/dt	$V_D=400V$ Gate Open $T_j=125$		MIN.	2000	V/ μs
(dI/dt) _c	(dV/dt) _c =20V/ μs $T_j=125$		MIN.	15	A/ms
t_{on}	$I_G=80mA$ $I_A=400mA$ I_R				

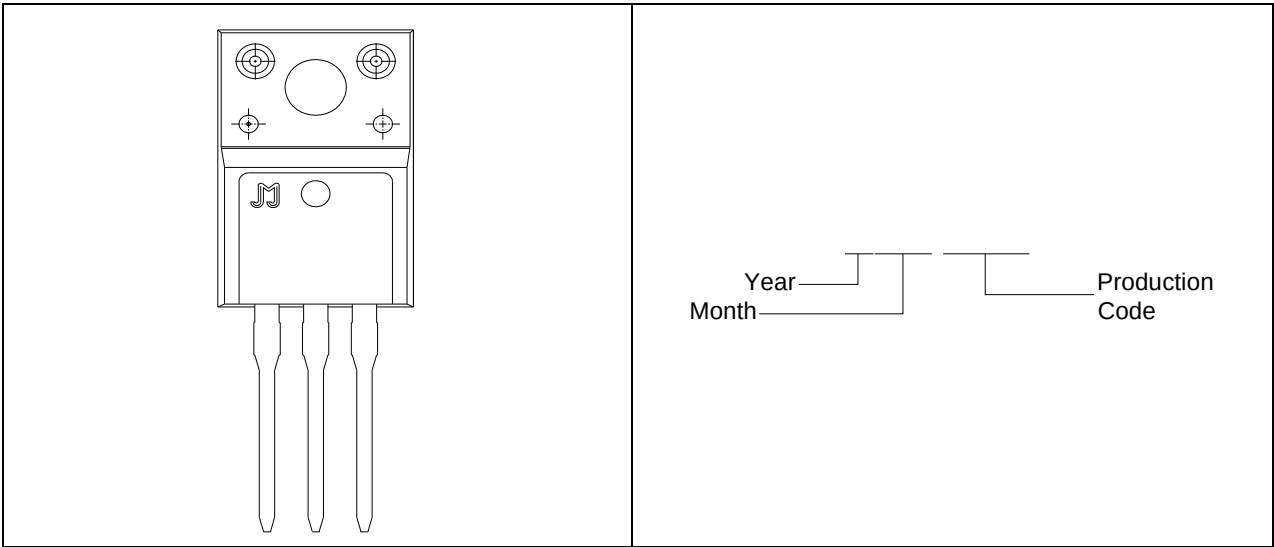
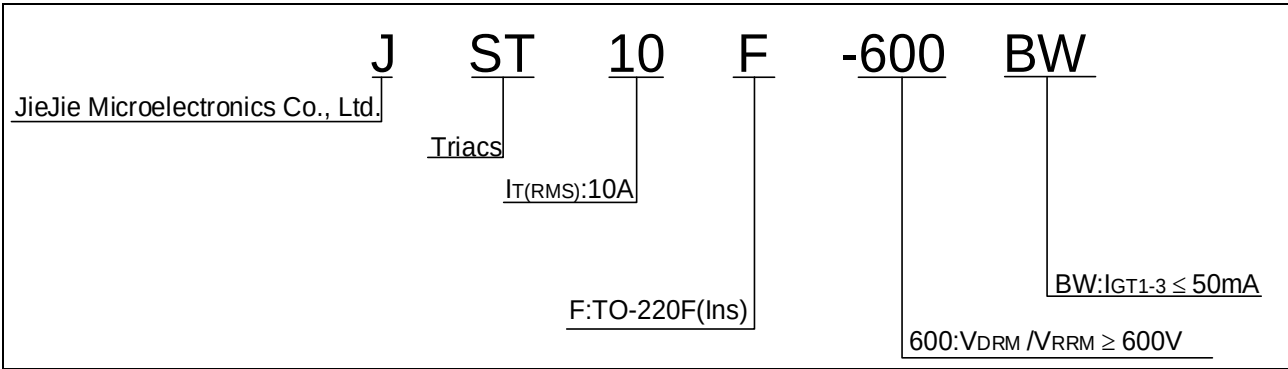




FIG.1: Maximum power dissipation versus RMS on-state current

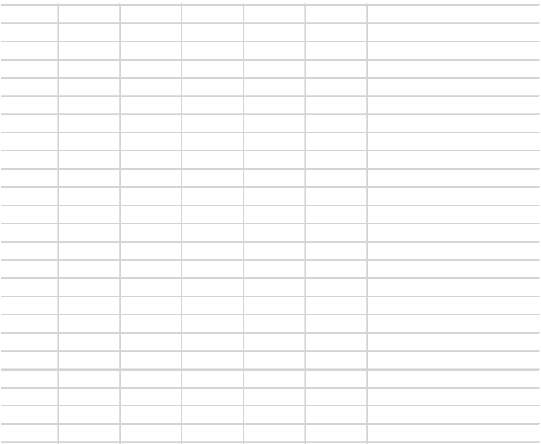
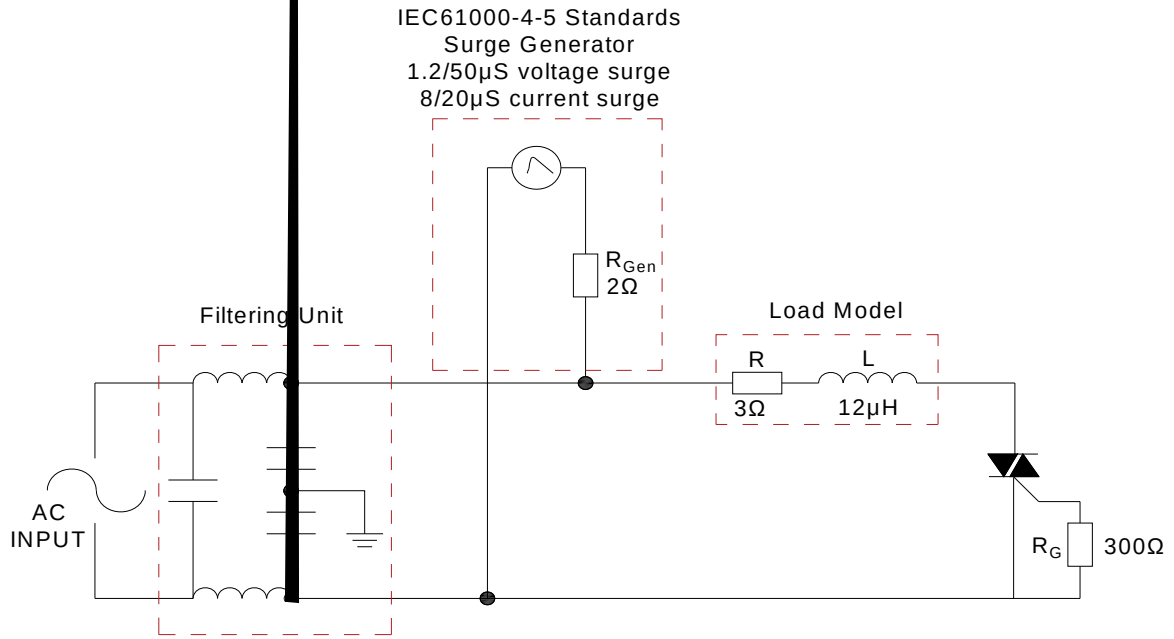


FIG.2: RMS on-state current versus case temperature

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





Order code	Voltage V _{DRM} /V _{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)
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