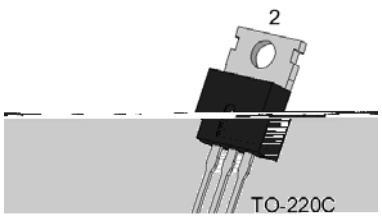
JST138C-600F 12A TRIAC

Rev.A.1.1

DESCRIPTION:

T JST138C-600F iac is a b
A v h ig l can b
ap ates h as h ea ne gh bo hood
sig nds fo h as e op ating h t
dim ped cas F om T2 em ins also
ex al h ea a kage TO-220C is RoHS c pl n



MAIN FEATURES

Sym	b Valu b	Uni n
$I_{T(RMS)}$	12	A
V_{DRM}/V_{RRM}	600	V
I_{T} / / /	25/25/25/70	A

ABSOLUTE MAXIMUM RATINGS

Parameter		Symbol	Value	Unit
Sto ge j c de pe a e ge		T_{stg}	-40-150	
Op n j c de pe a e ge		T_j	-40-125	
Rep e pe k f -s e vo ge (T j=25)		V_{DRM}	600	V
Rep e pe k ev se vo ge (T j=25)		V_{RRM}	600	V
RMS o -s e c e (T c 98)		$I_{T(RMS)}$	12	A
No epe e ve pe k o -s e c e (f l cy e , t p=20ms T j=25)		I_{TSM}	95	A
No epe e ve pe k o -s e c e (f l cy e , t p=16.6ms T j=25)			105	
I^2t va e fo fu (t p=10ms T j=25)		I^2t	45	A^2s
C i c l a e o i s fo o -s e c e (I G =2×I GT , f=100Hz, T j=125)	-	dI/dt	100	A/μs
	-		70	
Peak ga e c e (t p=20μs, T j=125)		I_{GM}	4	A
Ave ge ga e po e d ss pa o (T j=125)		$P_{G(AV)}$	0.5	W
Peak ga e po e		P_{GM}	10	W
Peak s a ge (T j=25 ; o -epe i ve, o f -s e; F I G.7)		V_{pp}	1	kV

ELECTRICAL CHARACTERISTICS (Tj=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D=12V R_L=33Ω	- -	MAX.	25	mA
				70	
V_{GT}		ALL	MAX.	1	V
V_{GD}	V_D=V_{DRM} Tj=125 R_L=3.3kΩ	ALL	MIN.	0.2	V
I_L	I_G=1.2 I_{GT}	- -	MAX.	40	mA
				90	
I_H	I_T=500mA		MAX.	40	mA
dV/dt	V_D=400V Gate Open Tj=125		MIN.	250	V/μs
(dV/dt)c	(dI/dt)c= 5A/ms Tj=110		MIN.	8	V/μs
t_{gt}	I_G=80mA I_A=400mA I_R=40mA Tj=25		TYP.	5	μs

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

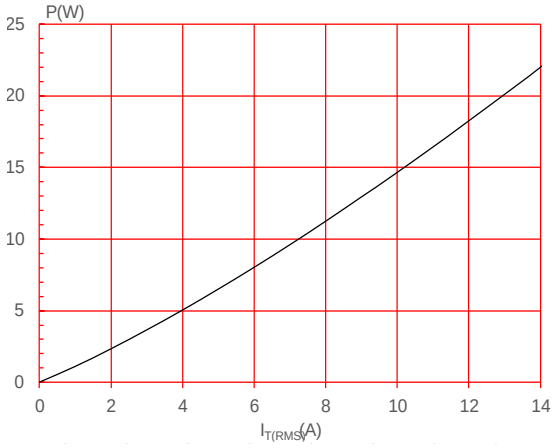

FIG.2: RMS on-state current vs case temperature

FIG.7 Test circuit for inductive load IEC -61000-4-5 standard