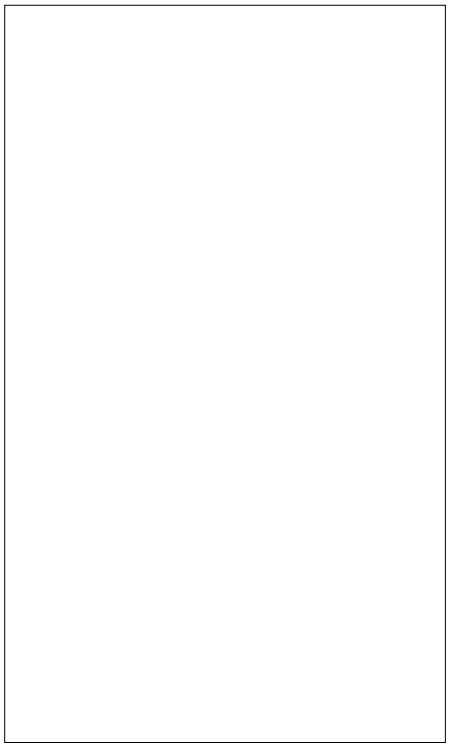
ACJT1210-8E 12A TRIAC

Rev.A.1.1

DESCRIPTION:

The ACJT1210-8E 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. The ACJT1210-8E embeds a TVS structure to absorb the inductive turn-off energy such as those described in the IEC 61000-4-5 standards. Package TO-263 is RoHS compliant.



MAIN FEATURES

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) 125

Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.8)	V_{pp}	4.5	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	10	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	V_D =V_{DRM} T_j =125 R_L =3.3kΩ	- -	MIN.	0.2	V
I_L	I_G =1.2I_{GT}	-	MAX.	25	mA
				30	
I_H	I_T =500mA		MAX.	20	mA
dV/dt	V_D=540V Gate Open T_j =125		MIN.	500	V/μs
(dI/dt)c	(dV/dt)c=10V/μs, T_j=125		MIN.	3	

ORDERING INFORMATION

AC J T 12 10 -8 E -/

- AC: AC switch
- J: JieJie Microelectronics Co., Ltd.
- T: Triacs
- 12: $I_{T(RMS)}$:12A
- 10: $I_{GT1-3} \leq$ 10mA
- -8: V_{DRM} /$V_{RRM} \geq$ 800V
- E: TO-263
- -/: Blank:Tube; -TR:Tape & Reel

MARKING

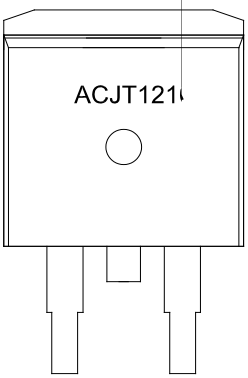


FIG.1: Maximum power dissipation versus RMS on-state current

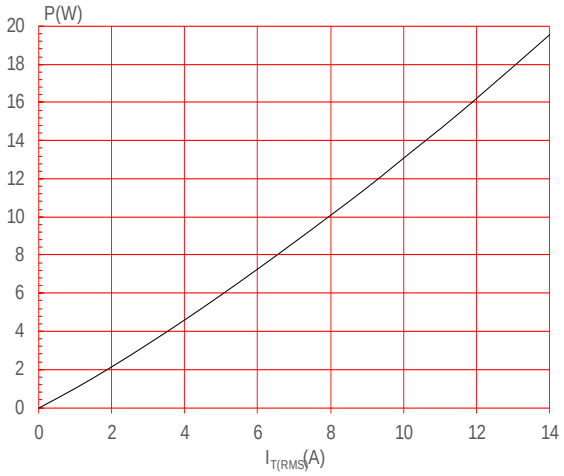


FIG.2: RMS on-state current versus case temperature

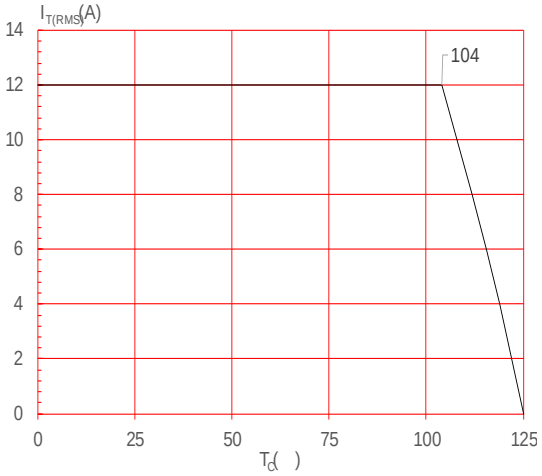


FIG.3: RMS on-state current versus ambient temperature (printed circuit board FR4,copper thickness:35μm)(full cycle)

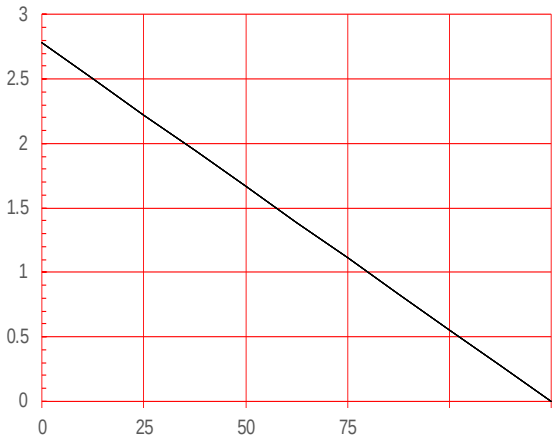
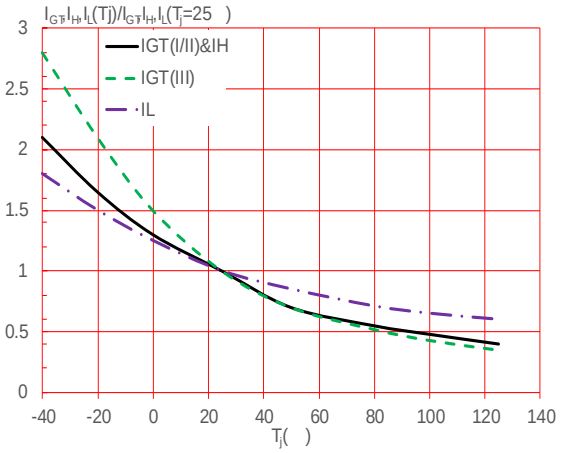
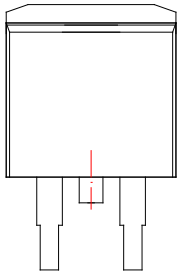


FIG.4: Surge peak on-state current versus number of cycles

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

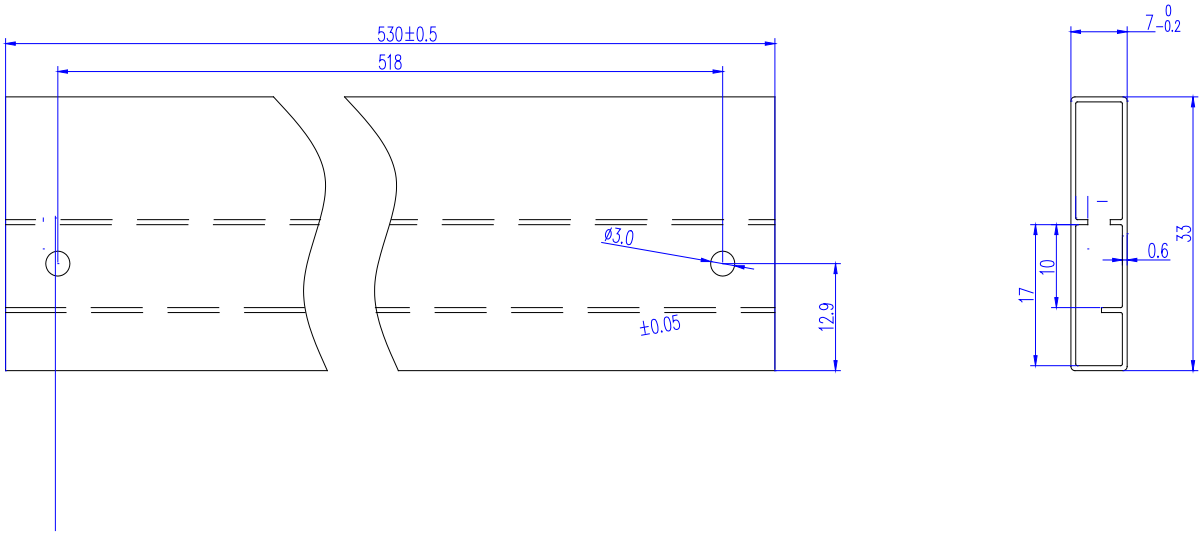


PACKAGE MECHANICAL DATA D



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.90		10.20	0.390		0.402
B	14.70		15.80	0.579		0.622
C	9.40		9.60	0.370		0.378
D	2.40			0.094		
E	1.20		1.50	0.047		0.059
F	0.75		0.85	0.029		0.033

DELIVERY MODE



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