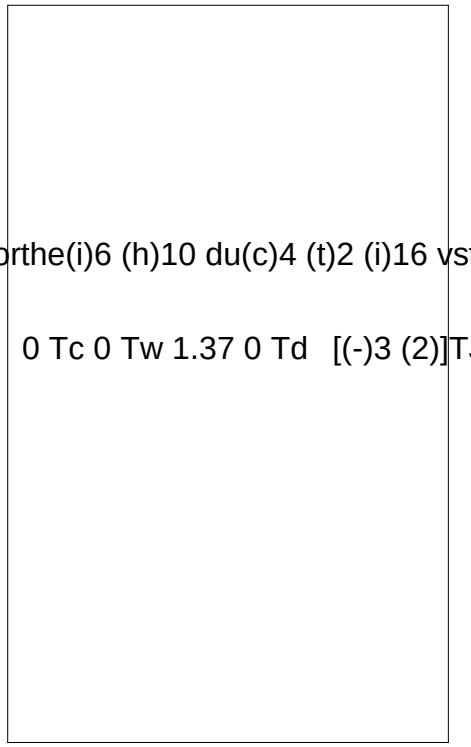
ACJT1210-10E 12A TRIAC

Rev.A.1.0

DESCRIPTION:

The ACJT1210-10E 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 ACJT1210-10E



das T srcttorthe(i)6 (h)10 du(c)4 (t)2 (i)16 vst-energy such as those cribed in the IEC 61000-4-5 standards. Package()]TJ -0.021 Tc 0.021 Tw 4.15 0 Td (TO)Tj 0 Tc 0 Tw 1.37 0 Td [(-)3 (2)]TJ 0.004

MAIN FEATURES

AB2SOLUTEMAXIMUM RATING2S

Parameter	Symbol	Va2lue	Un2it
Stage(j)6 (unc)14 (t)2 (i)6 (on)10 (t)2 (e)10 (m)-3T(p)10 (er)7 (at)14 (ure)	j	-40-150	7 ne range
		-40-125	
Repetitive peak off-state voltage(()7 (T)]TJ 0 Tc 0 Tw 8.04 0 0 8.04 248.04 306.84 Tm (j)Tj -0.004			
	I	120 132	A
I t()-10 (v)14 (al)6 (ue f)-8 (or)7 (fusing()-10 (()7 (t)]TJ 0 Tc 0 Tw 8.04 0 0 8.04 168.6s 173.76 Tm (			

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=670V Gate Open T_j =125		MIN.	300	V/μs
(dI/dt)c	(dV/dt)c=10V/μs, T_j=125		MIN.	3	A/ms
t_{on}	I_G=20mA I_A=200mA I_R=20mA T_j=25		TYP.	4	μs
t_{off}				50	
V_{CL}	I_{CL}=0.1mA t_p=1ms		MIN.	1050	V

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM} =17A t_p=380μs	T_j=25	1.45	V
V_{TO}	Threshold voltage	T_j		

ORDERING INFORMATION

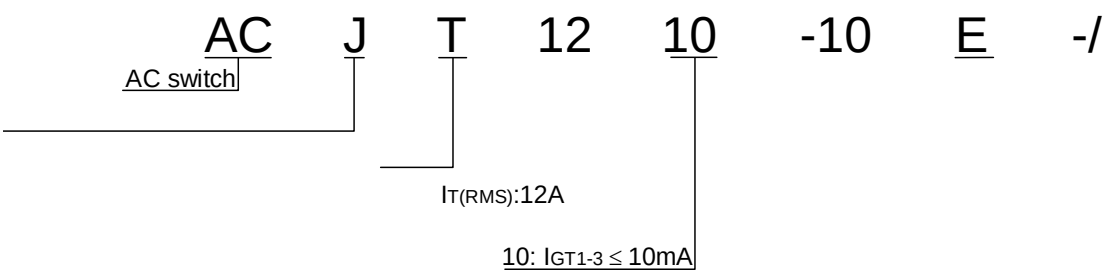


FIG.1 Maximum power dissipation versus RMS on-state current

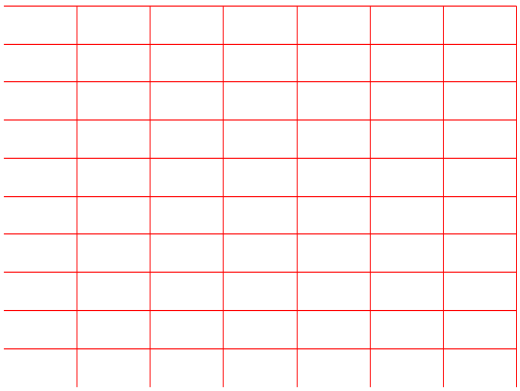
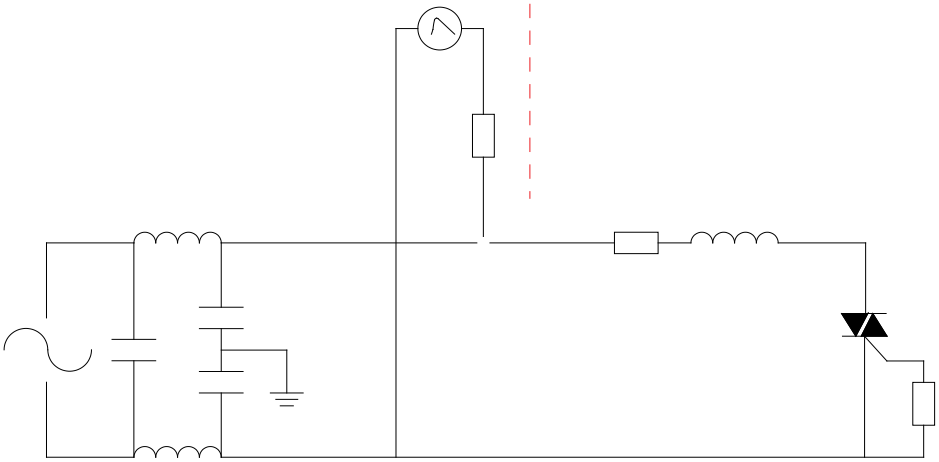


FIG.2: RMS on-state current versus case temperature

FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

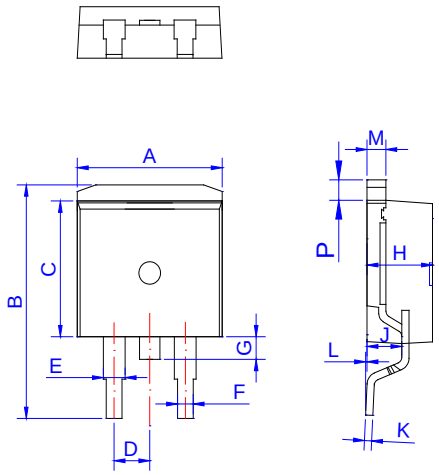


ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
ACJT1210-10E	1000	10	TO-263	50	Tube
ACJT1210-10E-TR				800	Tape & Reel

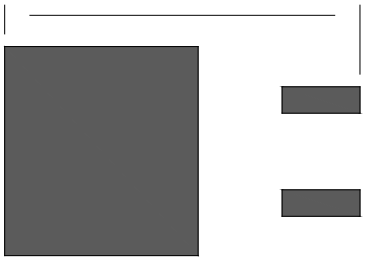
A

PACKAGE MECHANICAL DATA



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	0.37		0.378
D	2.40		2.70	0.094		0.106
E	1.20		1.50	0.047		0.059
F	0.75		0.85	0.029		0.033
G	1.00		1.50	0.039		0.059
H	4.40		4.70	0.173		0.185
J	2.30		2.70	0.091		0.106
K	0.38		0.55	0.015		0.022
L	0	0.10	0.25	0	0.004	0.010
M	1.25		1.35	0.049		0.053
P	1.20		1.50	0.047		0.059

FOOTPRINT-TO-263 (dimensions in mm)



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