

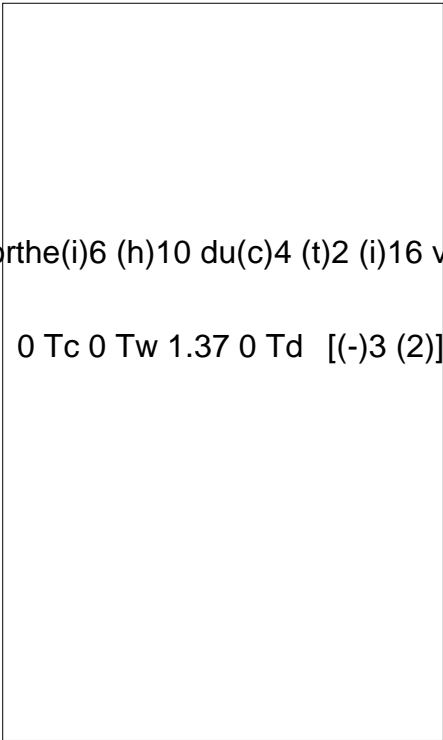


ACJT1210-10E 12A TRIAC

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



energy such as those described in the IEC 61000-4-5 standards. Package(T)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

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Stage(j)6 (unc)14 (t)2 (i)6 (on)10 (t)2 (e)10 (m)-3T(p)10 (er)7 (at)140 (15)7 ne range	j	-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	A
		132	
I t(-)10 (v)14 (al)6 (ue f)-8 (or)7=25 using(-)10 (()7 (t)]Tj 0 Tc 0 Tw 8.04 0 0 8.04 168.6s173.76 Tm (

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

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33$	- -	MAX.	10	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3K$	- -	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
$(dI/dt)_c$	$(dV/dt)_c=10V/\mu s$, $T_j=125$		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}	$I_{TM}=17A$ $t_p=380\mu s$	$T_j=25$	1.45	V

V_{TO} Threshold voltage 1.45 $13-3$ () T_j EMC ET 56.4 351. > $T_j/MCID$ 10

ORDERING INFORMATION

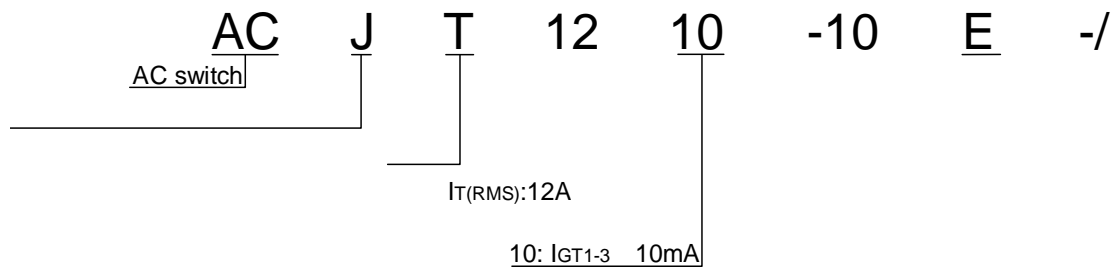


FIG.1 Maximum power dissipation versus RMS on-state current

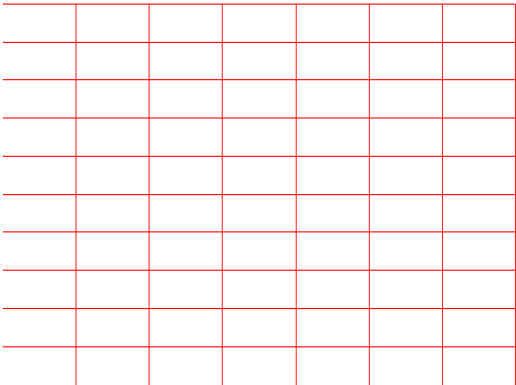
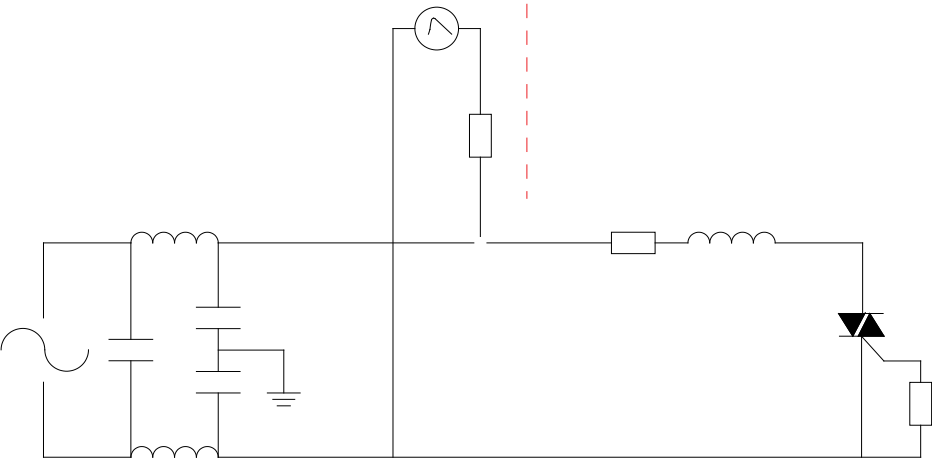


FIG.2: RMS on-state current versus case temperature

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

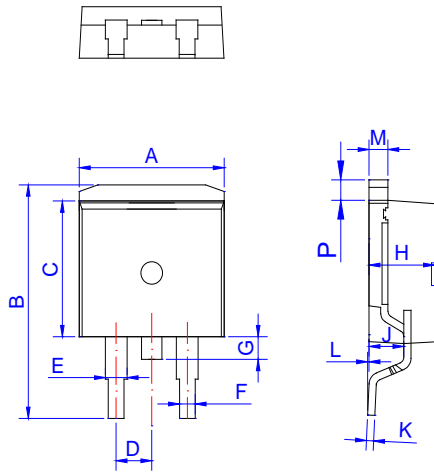


ORDERING INFORMATION

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

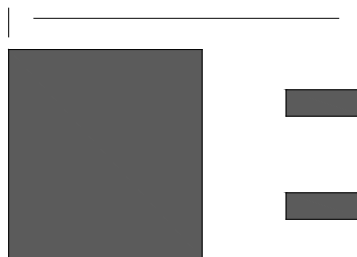
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PACKAGE MECHANICAL DATA



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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