



Peak pulse voltage ( $T_j=25$ ; non-repetitive, off-state; FIG.8)	$V_{pp}$	3	kV
--	----------	---	----

**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.	30	mA
				45	
$I_H$	$I_T=100mA$		MAX.	25	mA
$dV/dt$	$V_D=670V$ Gate Open $T_j=125$		MIN.	200	V/ $\mu s$
$(dI/dt)_c$	$(dV/dt)_c=10V/\mu s, T_j=125$		MIN.	3	A/ms
$t_{on}$	$I_G=20mA I_A=200mA I_R=20mA$ $T_j=25$		TYP.	4	$\mu s$
$t_{off}$				50	
$V_{CL}$	$I_{CL}=0.1mA t_p=1ms$		MIN.	1050	V

**STATIC CHARACTERISTICS**

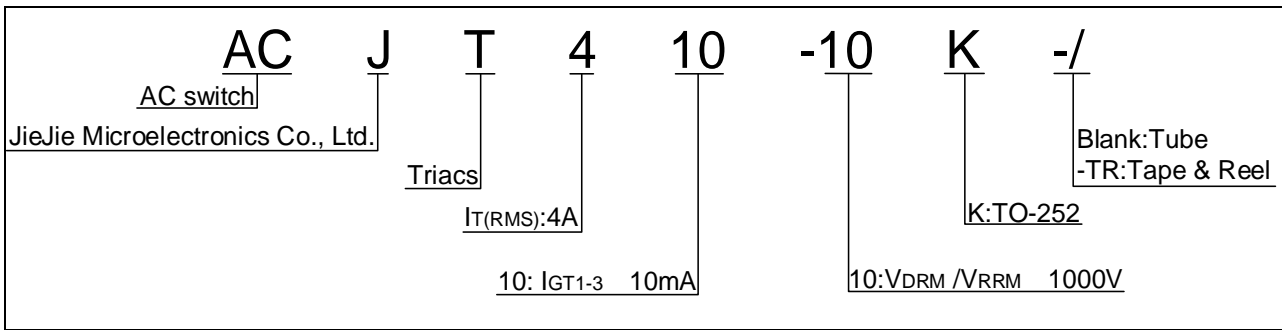
Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=5.6A t_p=380\mu s$	$T_j=25$	1.55	V
$V_{TO}$	Threshold voltage	$T_j=125$	0.73	V
$R_D$	Dynamic resistance	$T_j=125$	171	m
$I_{DRM}$	$V_D=V_{DRM} V_R=V_{RRM}$	$T_j=25$	8	$\mu A$
$I_{RRM}$		$T_j=125$	0.4	mA

**THERMAL RESISTANCES**

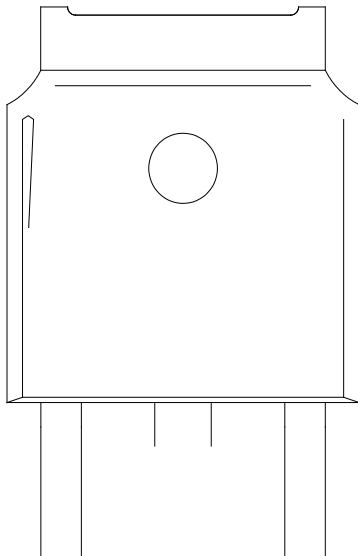
Symbol	Parameter	Value	Unit
--------	-----------	-------	------

$R_{th(j-c)}$  junction to case (AC) 4.5  $^{\circ}C/W$

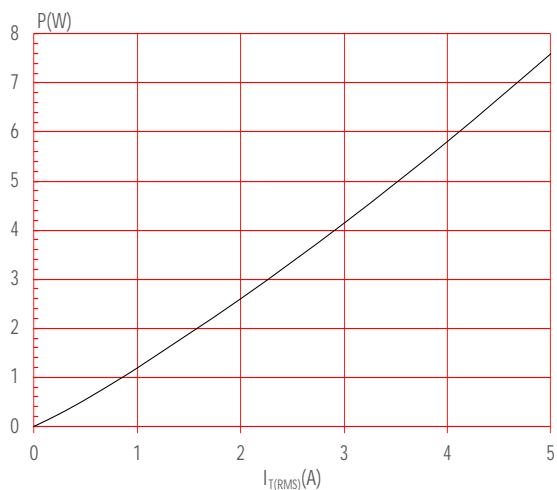
ORDERING INFORMATION



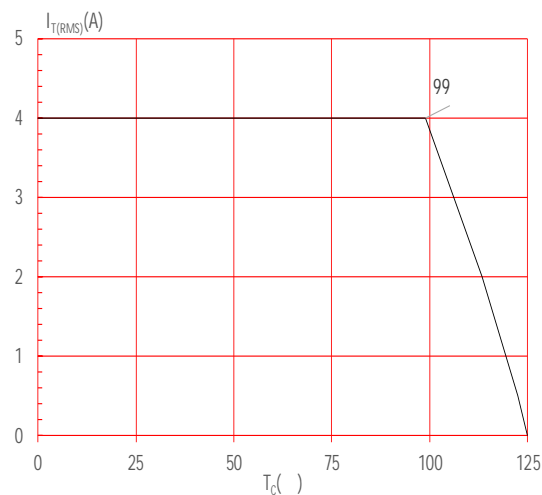
MARKING



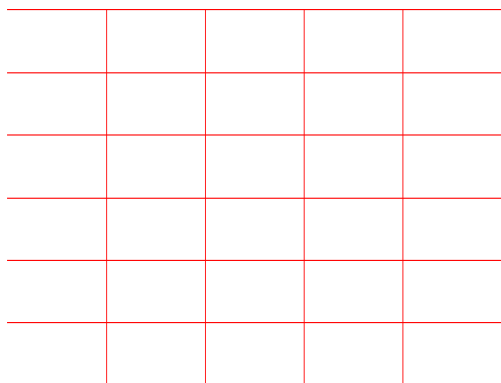
**FIG.1:** Maximum power dissipation versus RMS on-state current



**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 cycles010

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

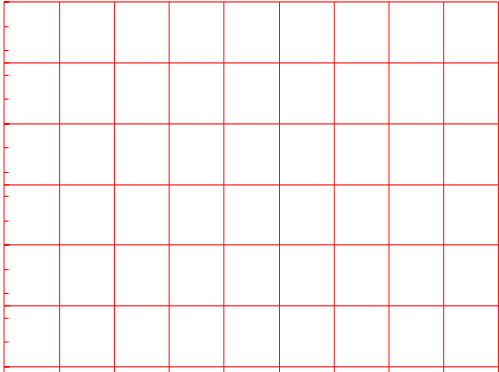
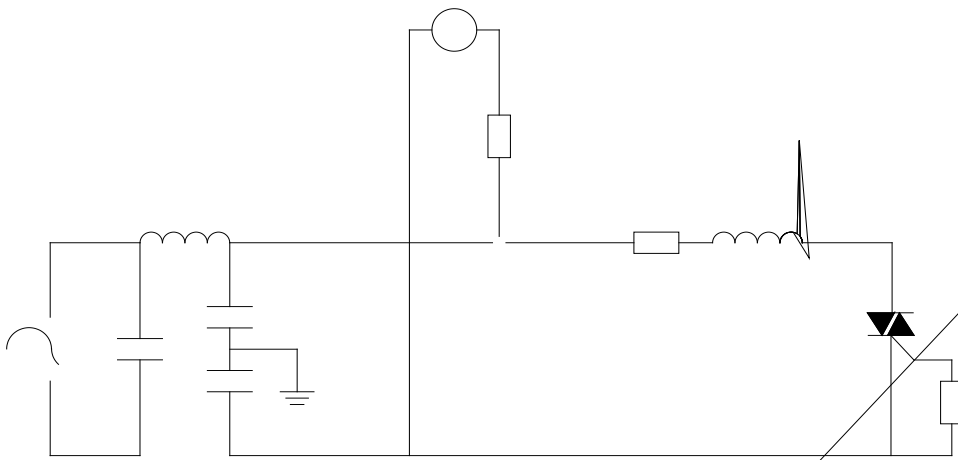


FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



**ORDERING INFORMATION**

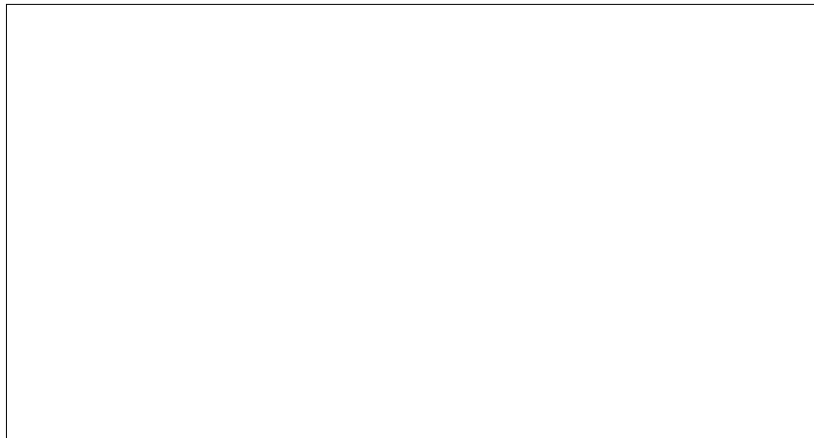
Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
ACJT410-10K	1000	10	TO-252	80	Tube
ACJT410-10K-TR				2,500	Tape & Reel

**Document Revision History**

Date	Revision	Changes
Apr.14, 2023	A.1.0	Last updated
Oct.22, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

PACKAGE MECHANICAL DATA

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.10		2.50	0.083		0.098
A2	0		0.15	0		0.006
B	0.66		0.86	0.026		0.034
B2	5.18		5.48	0.202		0.216
C	0.40		0.60	0.016		0.024
C2	0.44		0.58	0.017		0.023
D	5.90		6.30	0.232		0.248
D1						
E	6.40		6.80	0.252		0.268
E1	4.63			0.182		
G	4.47		4.67	0.176		0.184
G1	2.18		2.38	0.086		0.094
L	1.09		1.21	0.043		0.048
L2	1.35		1.65	0.053		0.065



**ACJT410-10K**

