

JIEJIE MICROELECTRONICS CO. , Ltd

Average gate power dissipation ($T_j=125^\circ\text{C}$)	$P_{G(AV)}$	0.5	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25^\circ\text{C}$; non-repetitive, off-state; FIG.7)	V_{pp}	3	kV

ELECTRICAL CHARACTERISTICS (unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V R_L=33$	I - II - III	MAX.	5	mA
V_{GT}		I - II - III	MAX.	1	V
V_{GD}	$V_D=V_{DRM} T_j=125^\circ\text{C}$ $R_L=3.3K$	I - II - III	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	I - III	MAX.	15	mA
		II		20	
I_H	$I_T=100\text{mA}$		MAX.	10	mA
dV/dt	$V_D=670V$ Gate Open $T_j=125^\circ\text{C}$		MIN.	150	V s
$(dI/dt)_c$	$(dV/dt)_c=1$ $j=125^\circ\text{C}$		MIN.	1.2	A/ms
t_{on}	$I_G=10\text{mA} I_A=200\text{mA} I_R=20\text{mA}$ $T_j=25^\circ\text{C}$		TYP.	2.5	s
t_{off}				35	
V_{CL}	$I_{CL}=0.1\text{mA} t_p=1\text{ms}$		MIN.	1050	V

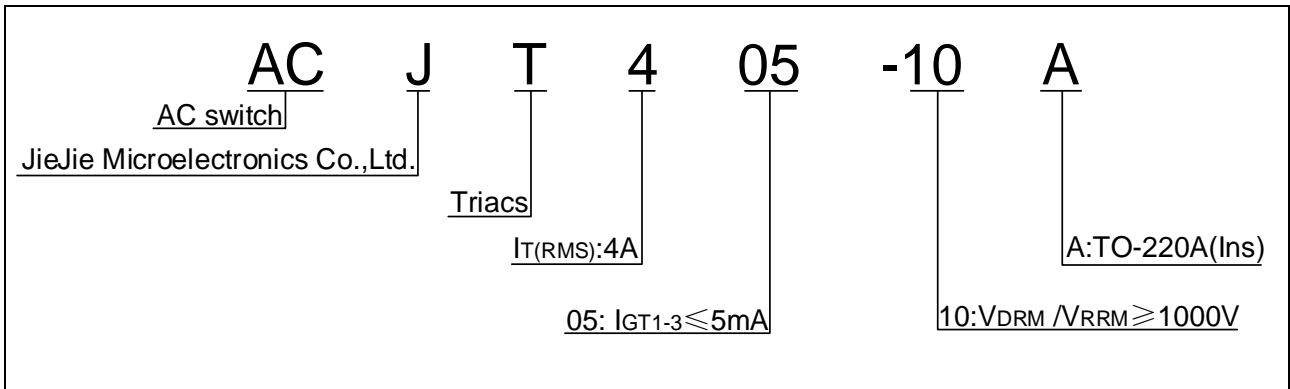
STATIC CHARACTERISTICS

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

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	3.3	$^\circ\text{C/W}$
$R_{th(j-a)}$	junction to ambient (AC)	60	$^\circ\text{C/W}$

ORDERING INFORMATION



MARKING

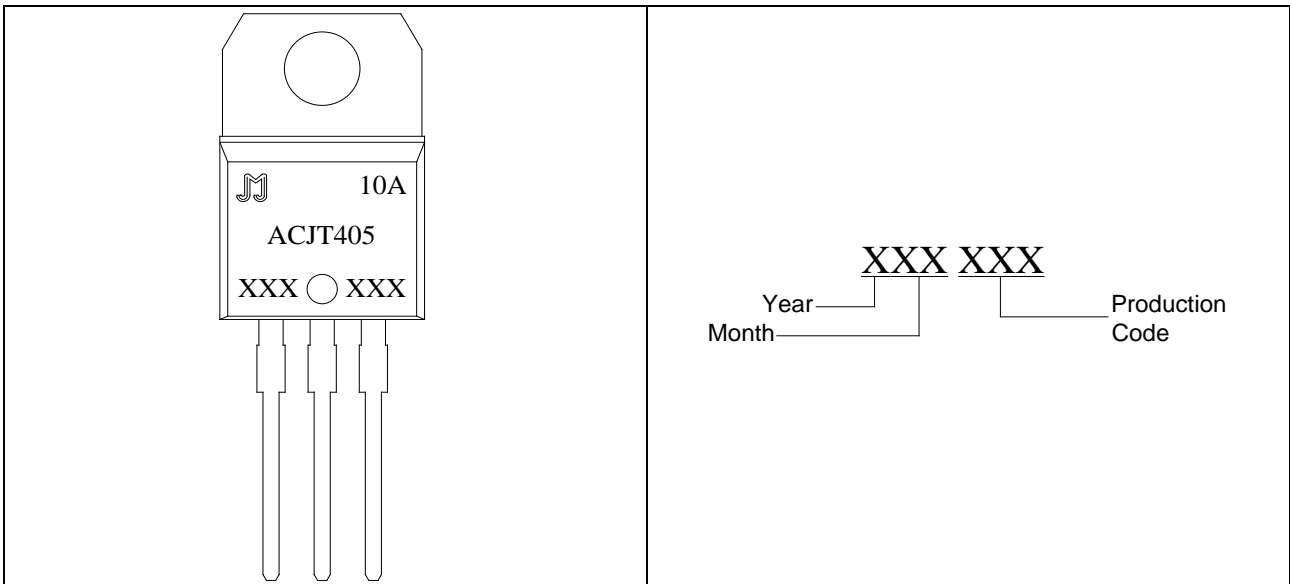


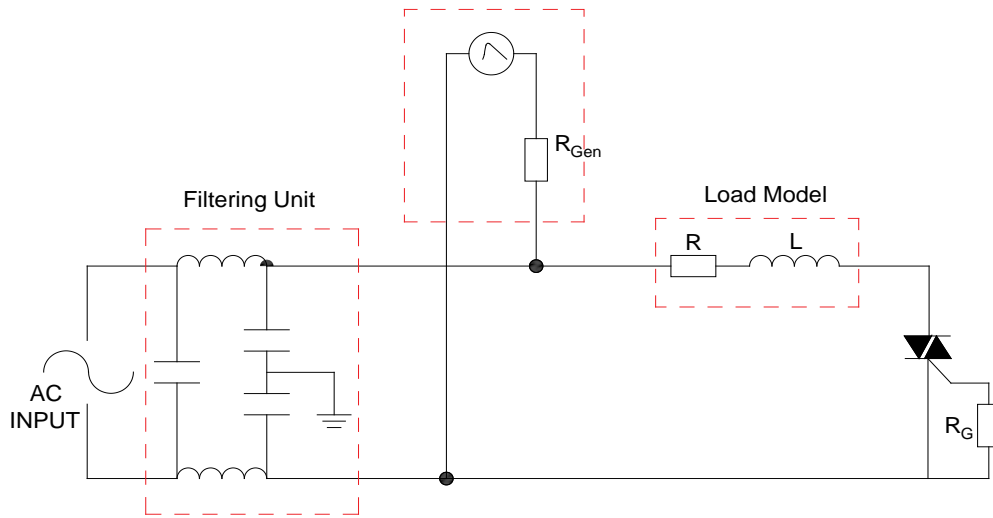
FIG.1 Maximum power dissipation versus RMS on-state current



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

FIG.7: Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

IEC61000-4-5 Standards
Surge Generator



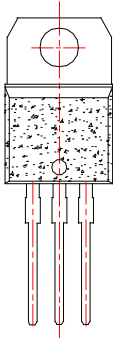
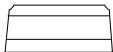
ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
ACJT405-10A	1000	5	TO-220A(Ins)	50	Tube

Document Revision History

Date	Revision	Changes
Apr.14, 2023	A.1.0	Last updated

PACKAGE MECHANICAL DATA



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