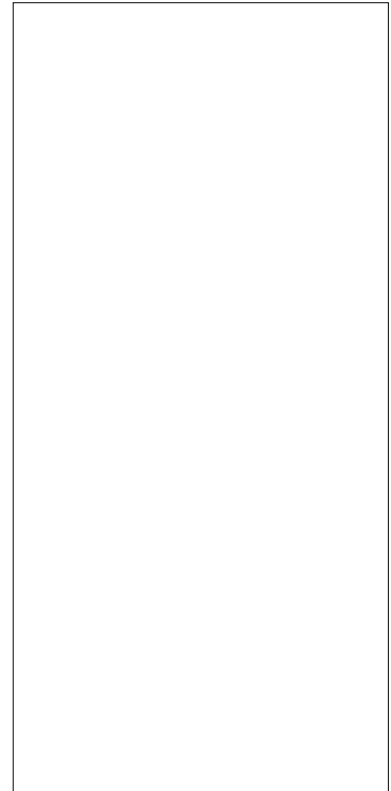




ACJM0435-8F 4A TRIAC

Rev.A.1.0

The ACJM0435-8F triac is suitable for general purpose AC switching. It is more suitable for the switch functions of washing machines' water valve, positive inversion of motor, heat pump...The ACJM0435-8F embeds a TVS structure to absorb the inductive turn-off energy such as those described in the IEC 61000-4-5 standards. By using an external plastic package, ACJM0435-8F provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.



Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	°C
Operating junction temperature range	T_j	-40-125	°C
Repetitive peak off-state voltage ($T_j=25^{\circ}C$)	V_{DRM}	800	V
Repetitive peak reverse voltage ($T_j=25^{\circ}C$)	V_{RRM}	800	V
RMS on-state current ($T_c \leq 94^{\circ}C$)	$I_{T(RMS)}$	4	A
Non repetitive surge peak on-state current (full cycle , $t_p=20ms$, $T_j=25^{\circ}C$)	I_{TSM}	35	A
Non repetitive surge peak on-state current (full cycle , $t_p=16.6ms$, $T_j=25^{\circ}C$)		40	
I^2t value for fusing ($t_p=10ms$, $T_j=25^{\circ}C$)	I^2t	6.125	A^2s
Critical rate of rise of on-state current ($I_G=2 I_{GT}$, $f=100Hz$, $T_j=125^{\circ}C$)	di/dt	100	A s

Peak gate current ($t_p=20 \mu s$, T

Peak gate power	P_{GM}	10	W
Peak pulse voltage ($T_j=25^\circ\text{C}$; non-repetitive, off-state; FIG.7)	V_{pp}	5	kV

(T_j=25°C unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12\text{V } R_L=33$	I - II -III	MAX.	35	mA
V_{GT}		I - II -III	MAX.	1	V
V_{GD}	$V_D=V_{DRM} T_j=125^\circ\text{C}$ $R_L=3.3\text{K}$	I - II -III	MIN.	0.2	V
I_L	$I_G=1.2I_{GT}$	I -III	MAX.	50	mA
		II		60	
I_H	$I_T=100\text{mA}$		MAX.	40	mA
dV/dt	$V_D=540\text{V}$ Gate Open $T_j=125^\circ\text{C}$		MIN.	1000	V s
(dI/dt) _c	(dV/dt) _c =20 , $T_j=125^\circ\text{C}$		MIN.	9	A/ms
t_{on}	$I_G=40\text{mA } I_A=200\text{mA } I_R=20\text{mA}$ $T_j=25^\circ\text{C}$		TYP.	3	s
t_{off}				30	
V_{CL}	$I_{CL}=0.1\text{mA } t_p=1\text{ms}$		MIN.	850	V

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=6\text{A } t_p=380 \text{ s}$	$T_j=25^\circ\text{C}$	1.8	V
V_{TO}	Threshold voltage	$T_j=125^\circ\text{C}$	0.94	V
R_D	Dynamic resistance	$T_j=125^\circ\text{C}$	125	
I_{DRM}	$V_D=V_{DRM} V_R=V_{RRM}$	$T_j=25^\circ\text{C}$	5	A
I_{RRM}		$T_j=125^\circ\text{C}$	0.5	mA

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

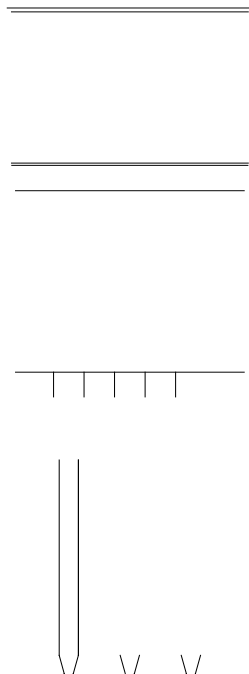
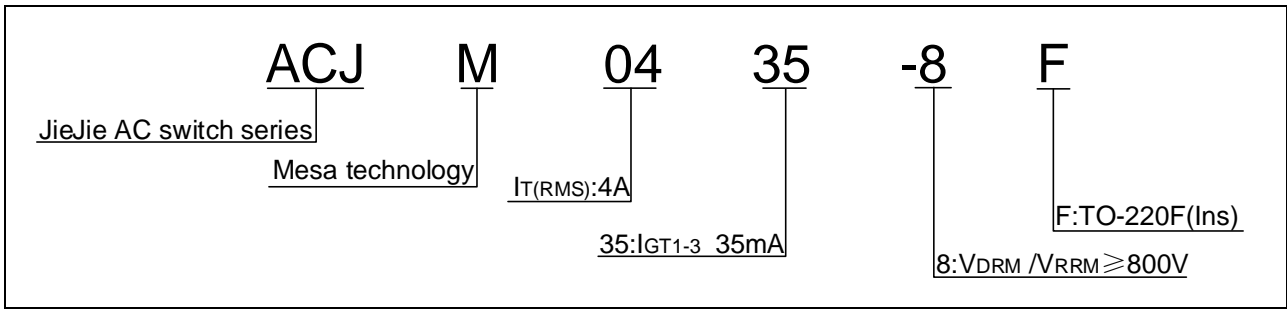
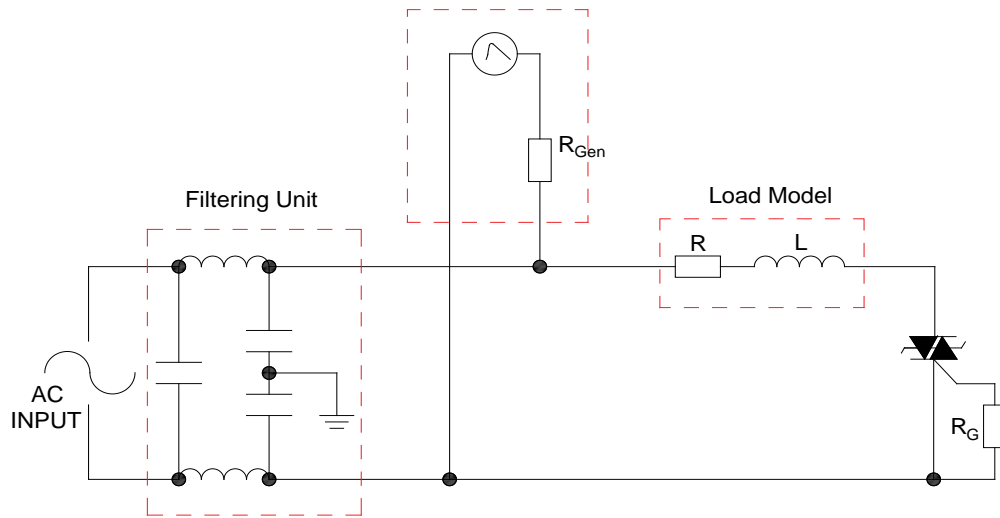


FIG.7: Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

IEC61000-4-5 Standards
Surge Generator

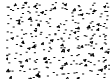


Refer to 《Instructions for installation of plastic-sealed in-line power devices》 released by JieJie

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
ACJM0435-8F	800	35	TO-220F(Ins)	50	Tube

Document Revision History

Date	Revision	Changes
Apr.10, 2023	A.1.0	Last updated



Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information. This document supersedes and replaces all information previously supplied.

is a registered trademark of Jiangsu JieJie Microelectronics Co., Ltd.
Copyright ©2023 Jiangsu JieJie Microelectronics Co., and