



DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT1625F SCR provides high dV/dt rate with strong resistance to electromagnetic interference. It is especially recommended for use on solid state relay, motorcycle, power charger, T-tools etc. From all three terminals to external heatsink, JCT1625F provides a rated insulation voltage of 2000 V_{RMS} , complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage ($T_j=25^\circ C$)	V_{DRM}	1600	V
Repetitive peak reverse voltage ($T_j=25^\circ C$)	V_{RRM}	1600	V
Average on-state current ($T_c \leq 46^\circ C$)	$I_{T(AV)}$	16	A
RMS on-state current ($T_c \leq 46^\circ C$)	$I_{T(RMS)}$	25	A

Non repetitive surge peak on-state current

($t_p=10ms$, $t_{emn} = 25^\circ C$) I_{TSM} 160A

Non repetitive surge peak on-state current ($t_p=8.3ms$, M

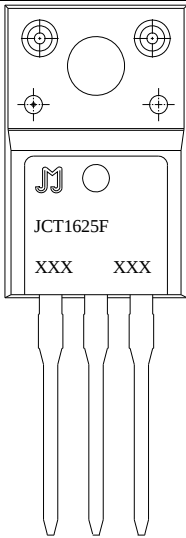
$j=25^\circ C$)	I^2t	392	A^2s
Critical rate of rise of on-state current ($I_G=2 \times I_{temn}$)			



ORDERING INFORMATION

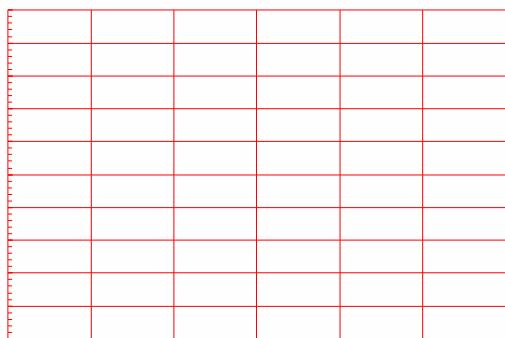
<u>J</u>	<u>CT</u>	<u>16</u>	<u>25</u>	<u>F</u>
JieJie Microelectronics Co.,Ltd.	SCRs	$16:V_{DRM}/V_{RRM} \geq 1600V$	$I_{T(RMS)}:25A$	F:TO-220F(Ins)

MARKING

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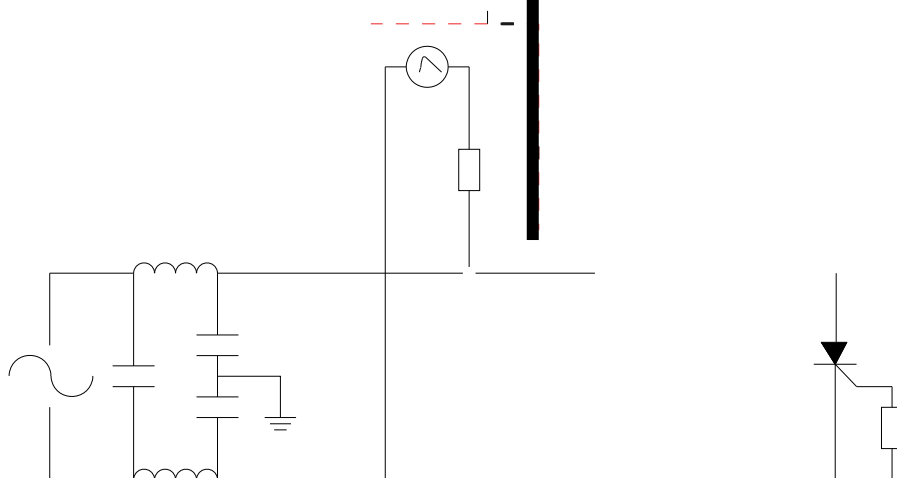
Maximum power dissipation versus
RMS on-state current



RMS on-state current versus case
temperature



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





ORDERING INFORMATION

Date	Revision	Changes
Apr.13, 2023	A.1.0	Last update
Sept.29, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA



PACKAGE MECHANICAL DATA



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