



JCT1625F 25A SCR

Rev.A.1.1

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

Parameter	Symbol	Value	Unit
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

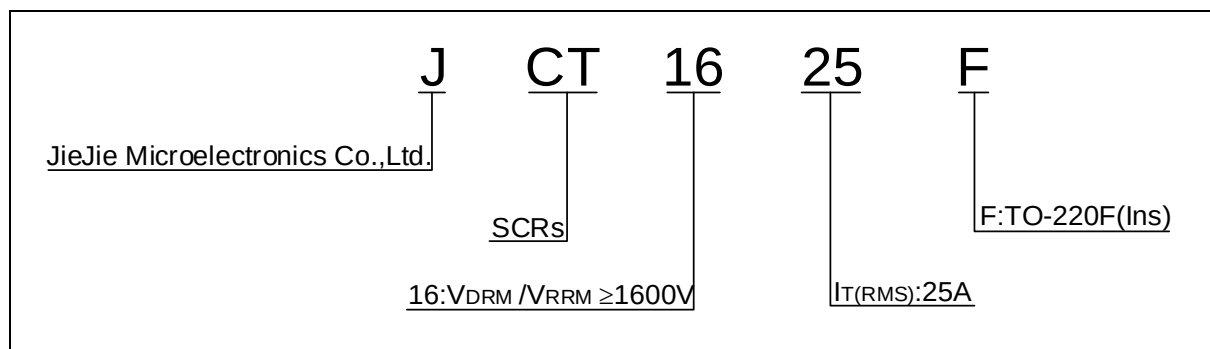
Non repetitive surge peak on-state current

($t_p=10ms$, $t_{on} \leq 25\mu s$) I_{TSM} 160A

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

I_{TSM} ($t_p=10ms$)	I^2t	392	A^2s
Critical rate of rise of on-state current ($I_G=2 \times I_{TSM}$)			

ORDERING INFORMATION



MARKING

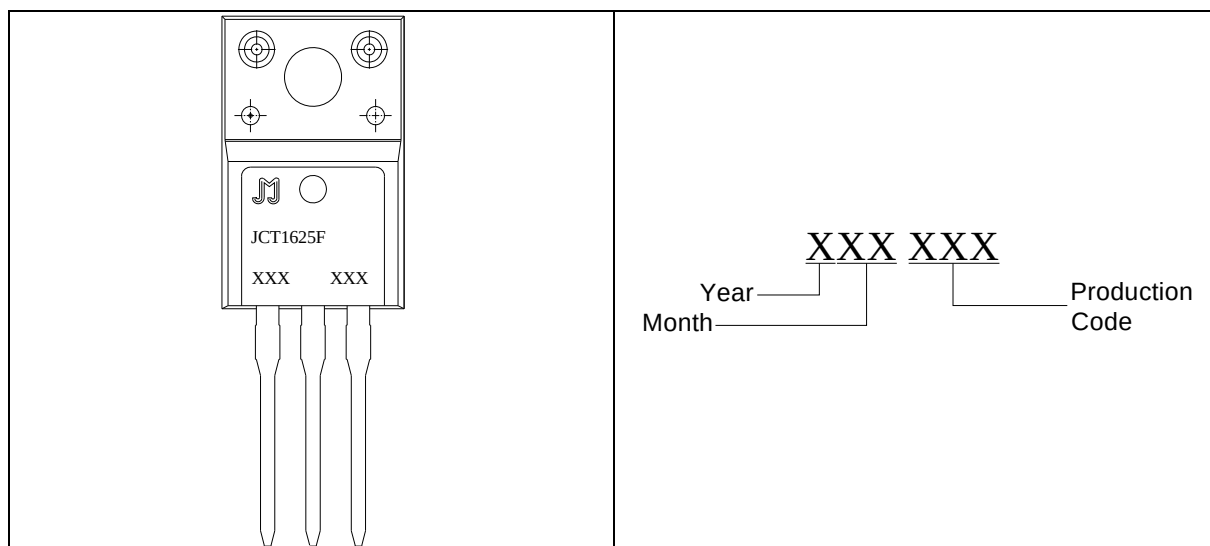


FIG.1: Maximum power dissipation versus RMS on-state current

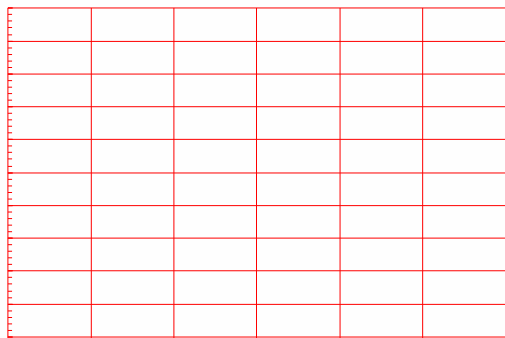
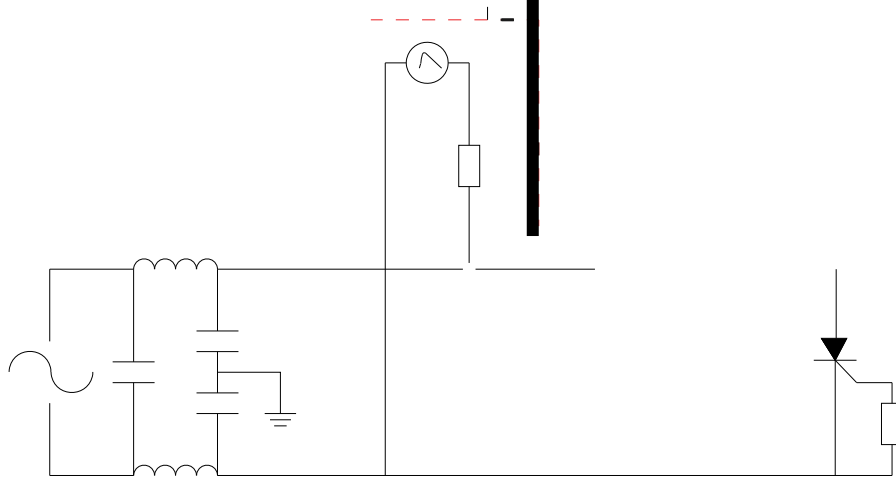


FIG.2: RMS on-state current versus case temperature

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



ORDERING INFORMATION

Order code	Voltage $V_{\text{DRM}}/V_{\text{RRM}}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT1625F	1600	40	TO-220F(Ins)	50	Tube

Document Revision History

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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