



JCT1625F 25A SCR

Rev.A.1.1

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.



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 °C)	V _{DRM}	1600	V
Repetitive peak reverse voltage (T _j =25 °C)	V _{RRM}	1600	V
Average on-state current (T _c 46 °C)	I _{T(AV)}	16	A
RMS on-state current (T _c 46 °C)	I _{T(RMS)}	25	A

Non repetitive surge peak on-state current

(t_p=10ms, T_j=25 °C) I_{TS} 180A Non repetitive surge peak on-state current (t_p=8.3ms, M

	I ² t	392	A ² s
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Critical rate of rise of on-state current

(I_G=2× I_T)

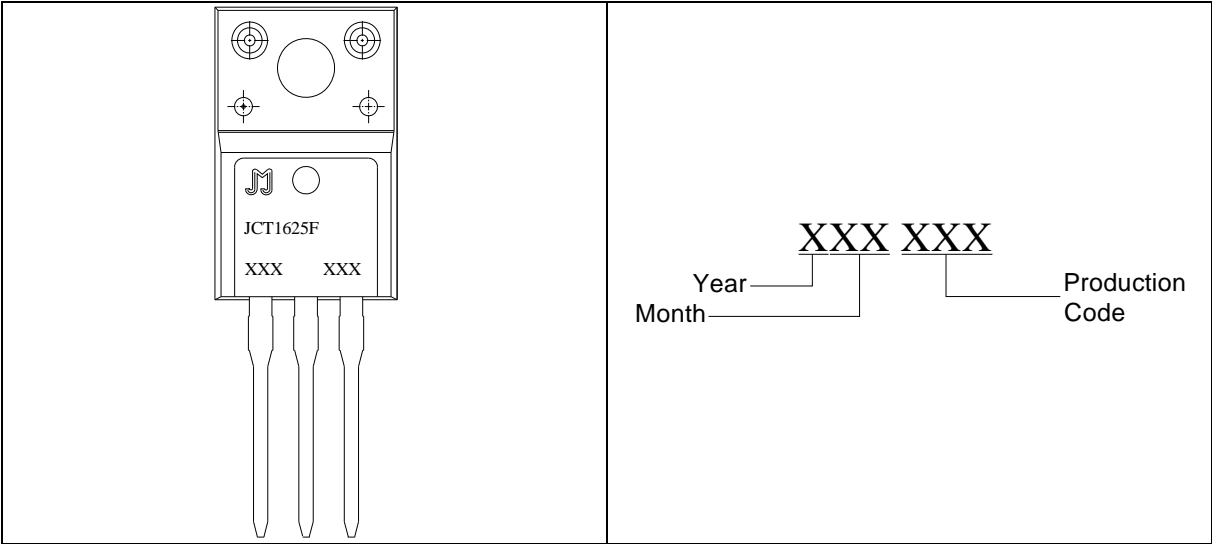
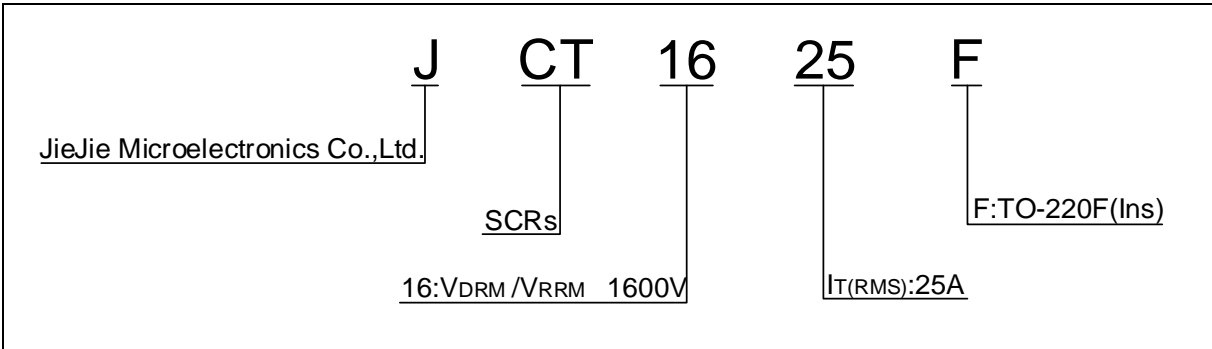


FIG.1: Maximum power dissipation versus RMS on-state current

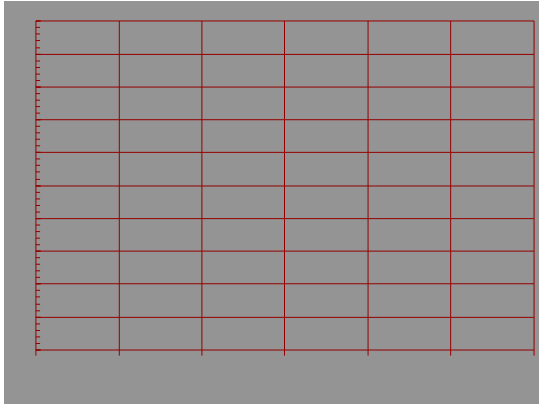
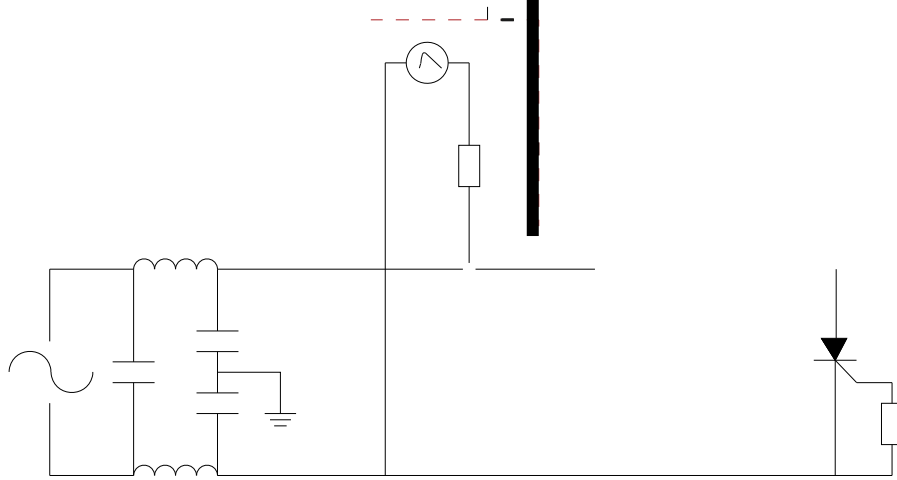


FIG.2: RMS on-state current versus case temperature

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





Order code	Voltage V_{DRM}/V_{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



JCT1625F