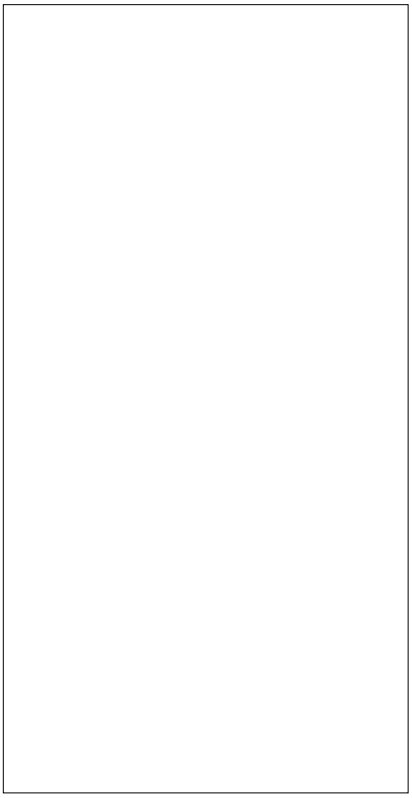
JCT1625F 25A SCR

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.

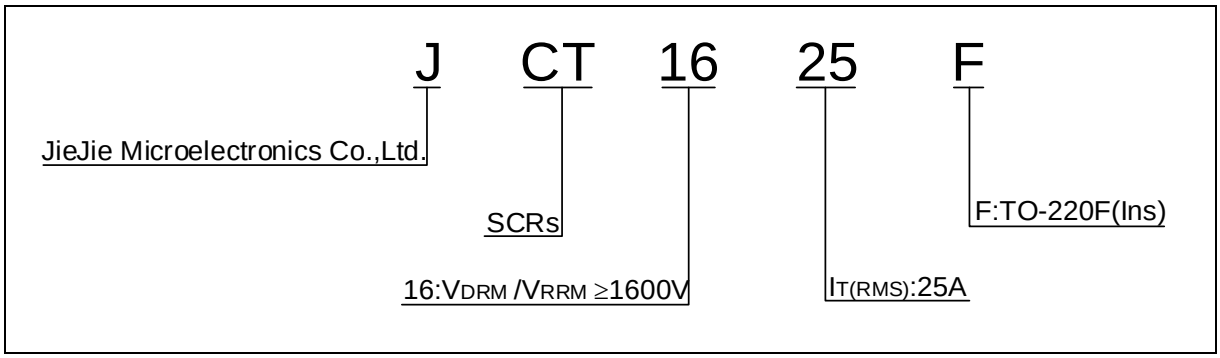


MAIN FEATURES

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)	V_{DRM}	1600	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	1600	V
Average on-state current ($T_C \leq$ 46)	$I_{T(AV)}$	16	A
RMS on-state current ($T_C \leq$ 46)	$I_{T(RMS)}$	25	A
Non repetitive surge peak on-state current (t_p=10ms, temn =25)	TSM	280	A
Repetitive surge peak on-state current (t_p=8.3ms, M			
j=25)	I^2t	392	A^2s
Critical rate of rise of on-state current (I_G=2 × I temn			

ORDERING INFORMATION



MARKING

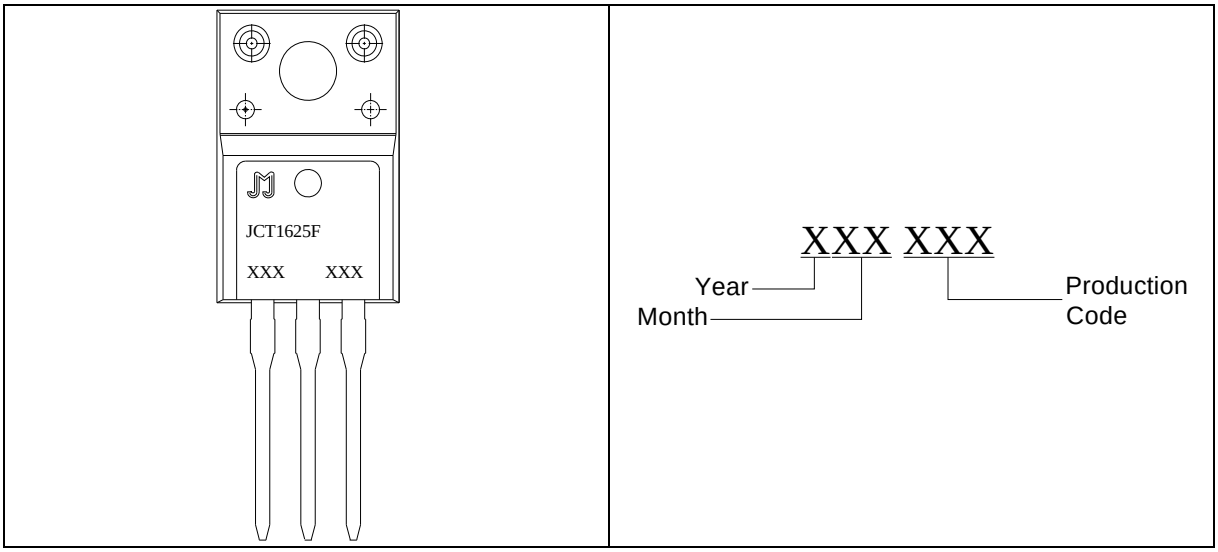


FIG.1: Maximum power dissipation versus RMS on-state current

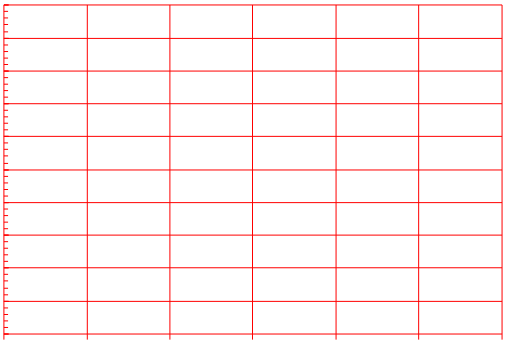
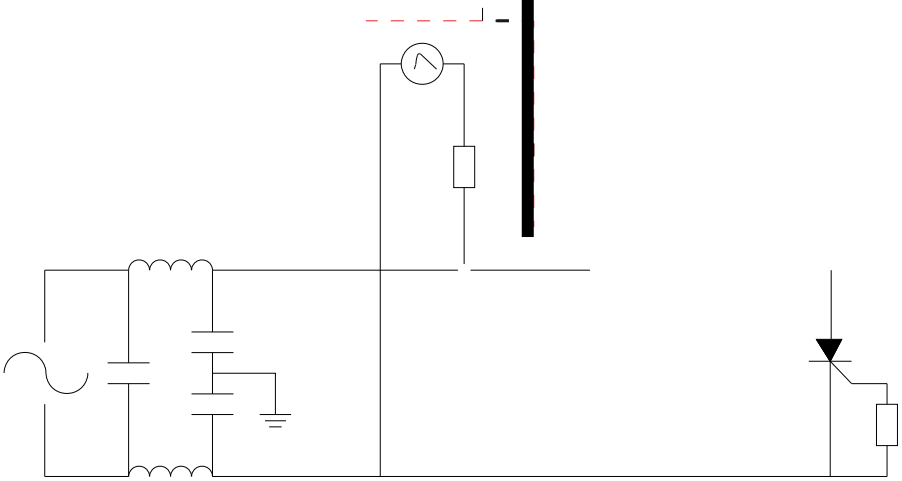


FIG.2: RMS on-state current versus case temperature

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



ORDERING INFORMATION

Order code	Voltage V_{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

PACKAGE MECHANICAL DATA



JCT1625F