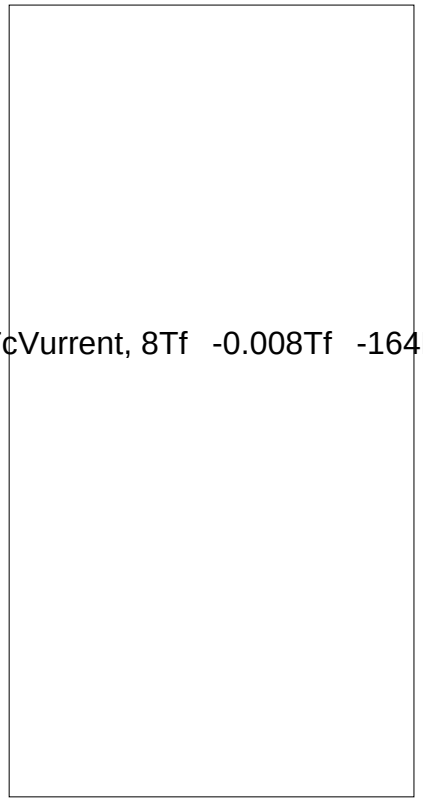
JCT1625A 25A SCR

Rev.A.1.1

DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT1625A 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,JCT1625A provides a rated insulation volta.01 068 T6 (01 06TJ -0.002T)4 (ol)1vta.01 06( ) TcVurrent, 8Tf -0.008Tf -164E6 (R)MS6 0



Peak gate current (t_p=20μs , T_j=125)	I_{GM}	5	A
Average gate power dissipation (T_j=125)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	20	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	1.5	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	V_D=12V R_L=33Ω	-	-	40	mA
V_{GT}		-	-	1	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3kΩ	0.2	-	-	V
I_L	I_G=1.2I_{GT}	-	-	100	mA
I_H	I_T=500mA	-	-	90	mA
dV/dt	V_D=1070V Gate Open T_j=125	1000	-	-	V/μs
t_{on}	I_G=50mA I_A=500mA I_R=50mA T_j=25	-	7	-	μs
t_{off}		-	100	-	

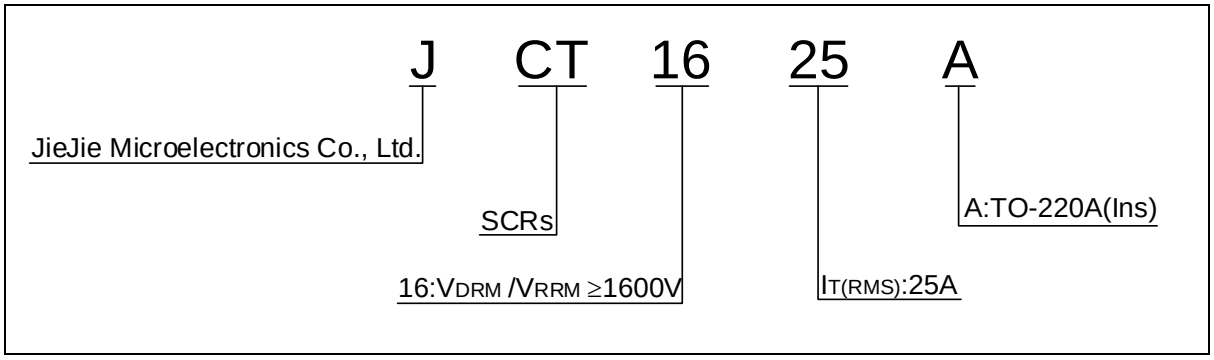
STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM}=50A t_p=380μs	T_j=25	1.8	V
V_{TO}	Threshold voltage	T_j=125	0.74	V
R_D	Dynamic resistance	T_j=125	27	mΩ
I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	T_j=25	10	μA
I_{RRM}		T_j=125	4	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (DC)	2.1	/W
$R_{th(j-a)}$	junction to ambient (DC)	65	/W

ORDERING INFORMATION



MARKING

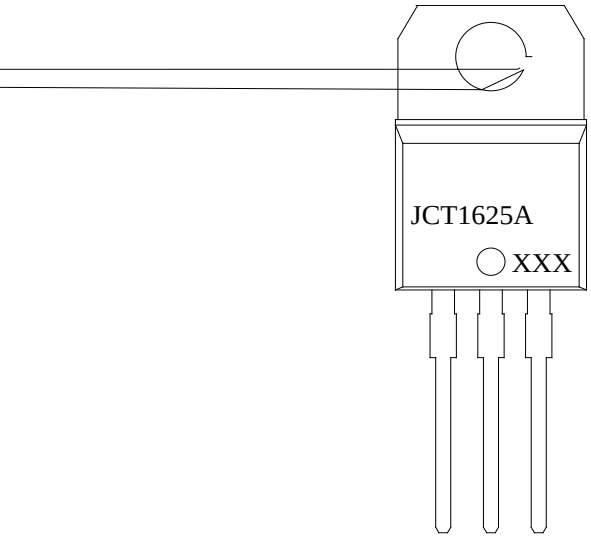


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.