

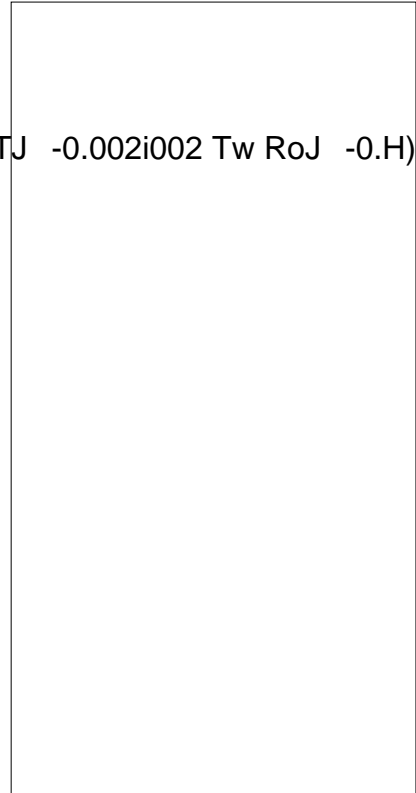


JCT1625A 25A SCR

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 voltage of 800V.



Peak gate current ($t_p=20\mu s$, $T_j=125$)	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}	$V_D=12V$ $R_L=33$	-	-	40	mA
V_{GT}		-	-	1	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k$	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	-	

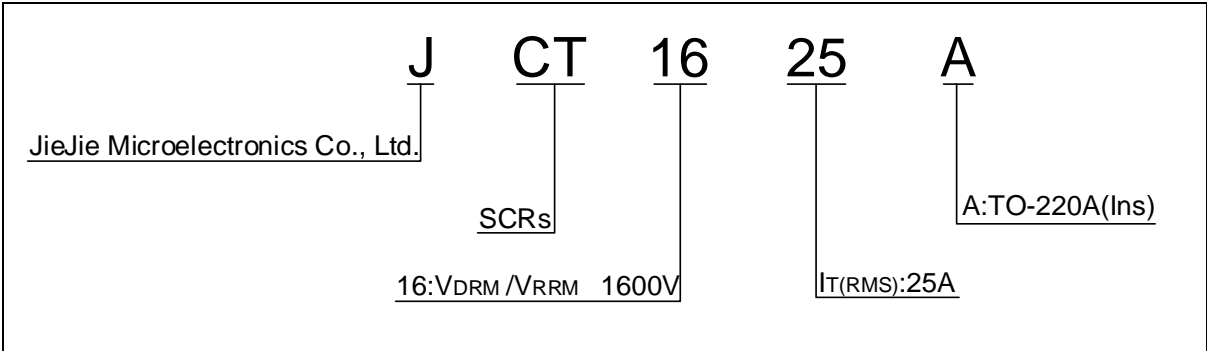
STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=50A$ $t_p=380\mu s$	$T_j=25$	1.8	V
V_{TO}	Threshold voltage	$T_j=125$	0.74	V
R_D	Dynamic resistance	$T_j=125$	27	m
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	$^{\circ}W$
$R_{th(j-a)}$	junction to ambient (DC)	65	$^{\circ}W$

ORDERING INFORMATION



MARKING

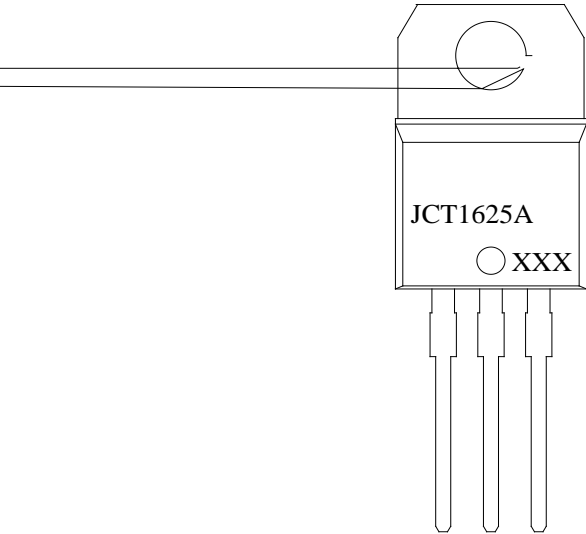
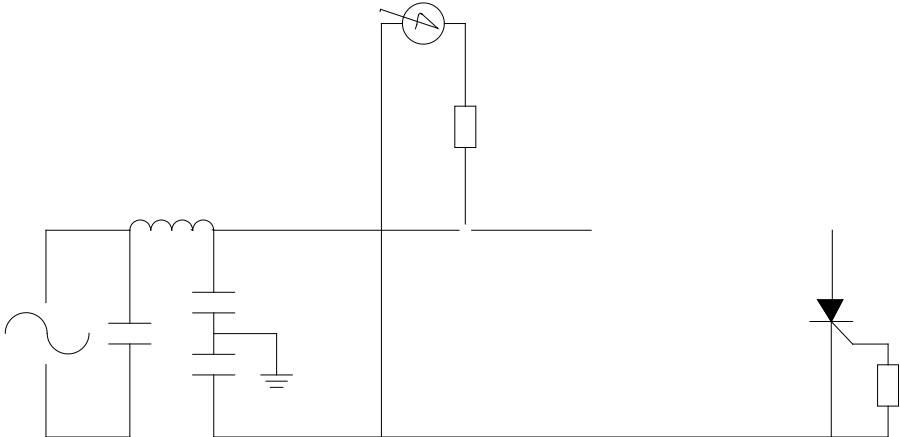


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.



JCT1625A

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