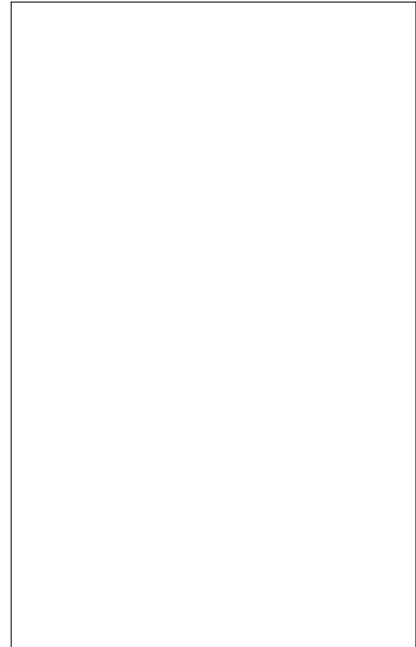




**JCT1640SJ 40A SCR**

Rev.A.1.0

With high ability to withstand the shock loading of large current, JCT1640SJ 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. Package TO-247J is RoHS compliant.



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Parameter	Symbol	Value	Unit
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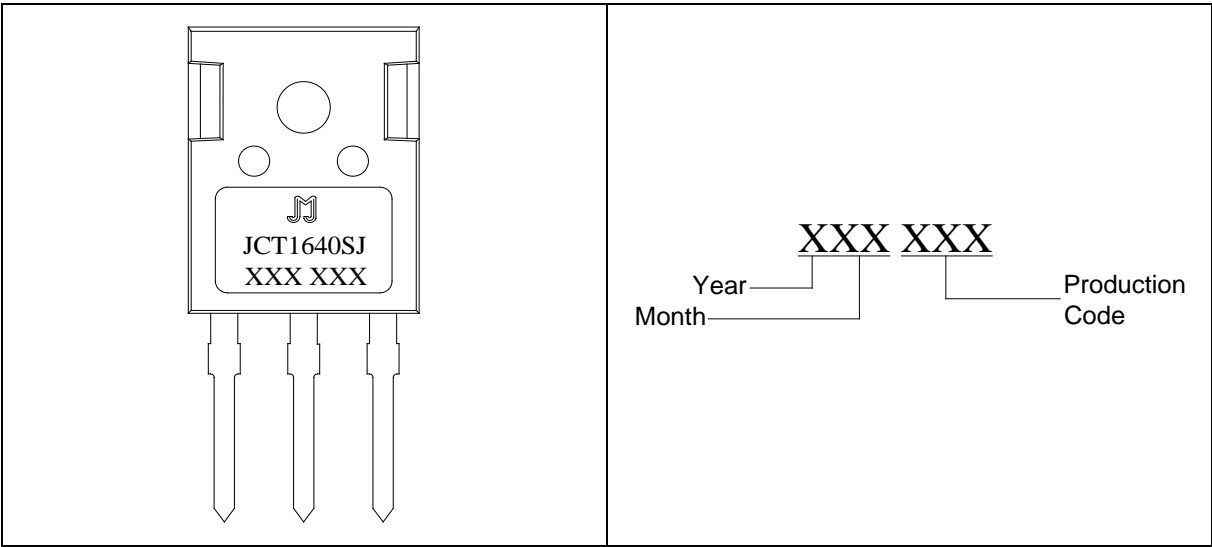
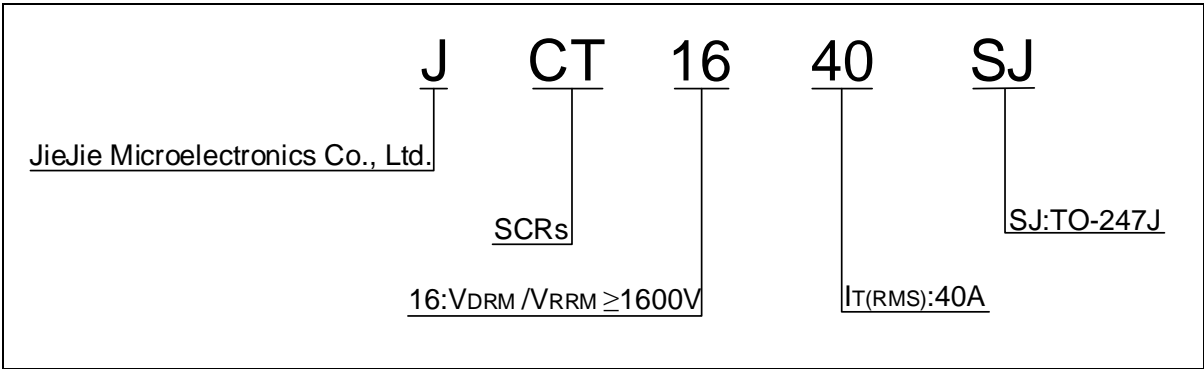
Peak gate power	$P_{GM}$	20	W
Peak pulse voltage ( $T_j=25$ ; non-repetitive,off-state;FIG.7)	$V_{pp}$	1.2	kV

( $T_j=25$  unless otherwise specified)

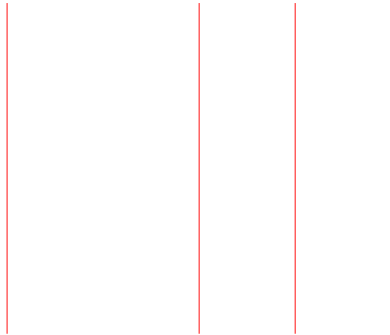
Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
$I_{GT}$	$V_D=12V R_L=33$	-	-	45	mA
$V_{GT}$		-	-	1	V
$V_{GD}$	$V_D=V_{DRM} T_j=125 R_L=3.3K$	0.2	-	-	V
$I_L$	$I_G=1.2I_{GT}$	-	-	150	mA
$I_H$	$I_T=500mA$	-	-	130	mA
dV/dt	$V_D=1070V$ Gate Open $T_j=125$	1500	-	-	V s
$t_{on}$	$I_G=100mA I_A=1A I_R=100mA$ $T_j=25$	-	7	-	s
$t_{off}$		-	120	-	

Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=80A t_p=380 s$	$T_j=25$	1.8	V
$V_{TO}$	Threshold voltage	$T_j=125$	0.78	V
$R_D$	Dynamic resistance	$T_j=125$	13	
$I_{DRM}$	$V_D=V_{DRM} V_R=V_{RRM}$	$T_j=25$	10	A
$I_{RRM}$		$T_j=125$	5	mA

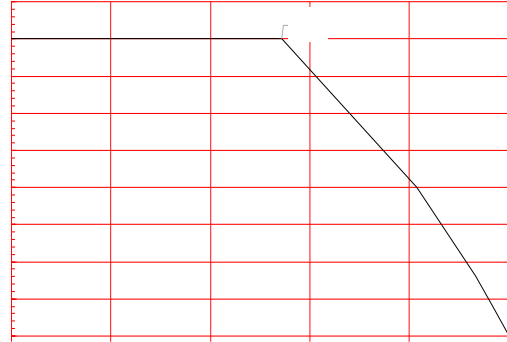
Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case(DC)	1	$\text{/W}$
$R_{th(j-a)}$	junction to ambient (DC)	50	$\text{/W}$



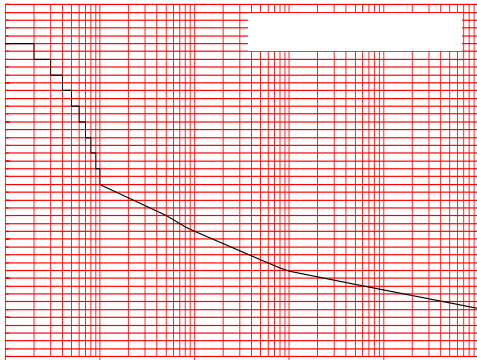
**FIG.1** Maximum power dissipation versus RMS on-state current



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



**FIG.3:** Surge peak on-state current versus number of cycles



**FIG.4:** On-state characteristics

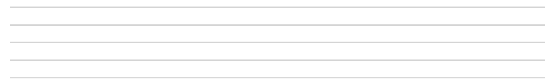
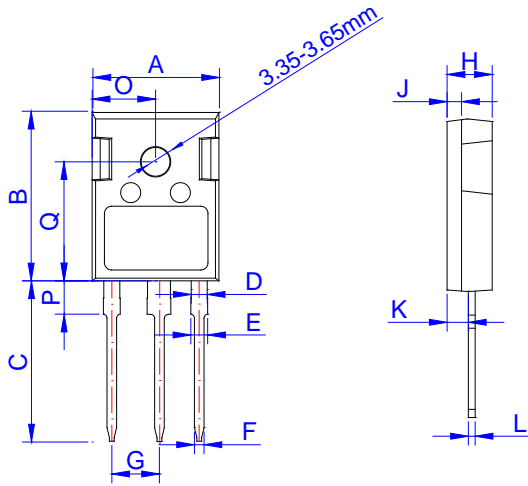


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.

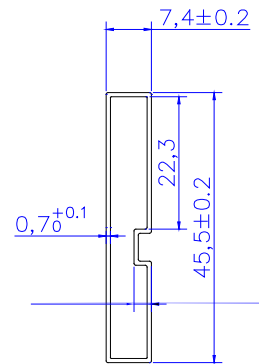
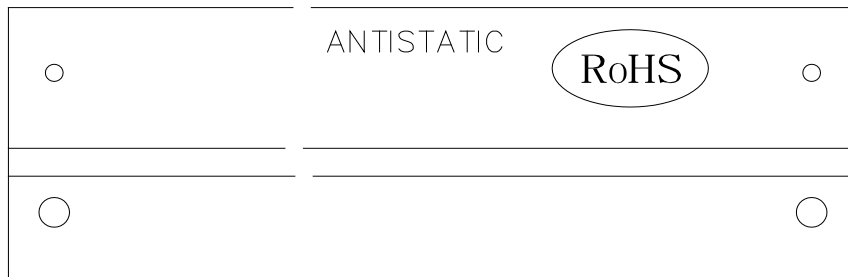


Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT1640SJ	1600	45	TO-247J	30	Tube

**Document**



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	15.50	15.80	16.10	0.610	0.622	0.634
B	20.80	21.00	21.20	0.819	0.827	0.835
C	19.70	20.00	20.30	0.776	0.787	0.799
D	1.80	2.00	2.20	0.071	0.079	0.087
E	1.90	2.10	2.30	0.075	0.083	0.091
F	1.00	1.20	1.40	0.039	0.047	0.055
G		5.44			0.214	
H	4.80	5.00	5.20	0.189	0.197	0.205
J	1.90	2.00	2.10	0.075	0.079	0.083
K	2.20	2.35	2.50	0.087	0.093	0.098
L	0.41	0.60	0.79	0.016	0.024	0.031
O		7.90			0.312	
P	4.05	4.15	4.25	0.016	0.024	0.031
Q		14.85			0.587	



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However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility.