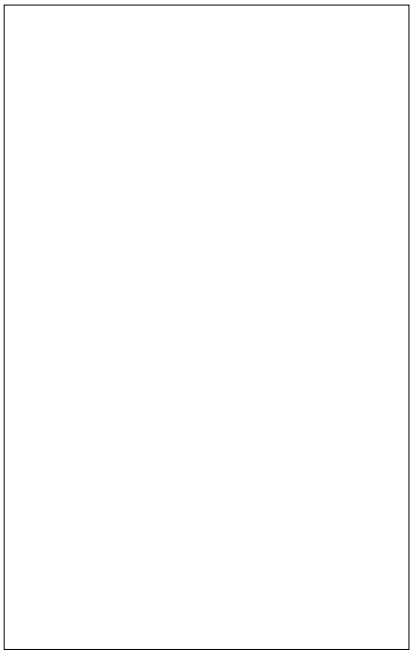
JCT620C 20A SCR

Rev.A.1.1

DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT620C 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-220C is RoHS compliant.



MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

Peak gate power	P_{GM}	20	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	0.5	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

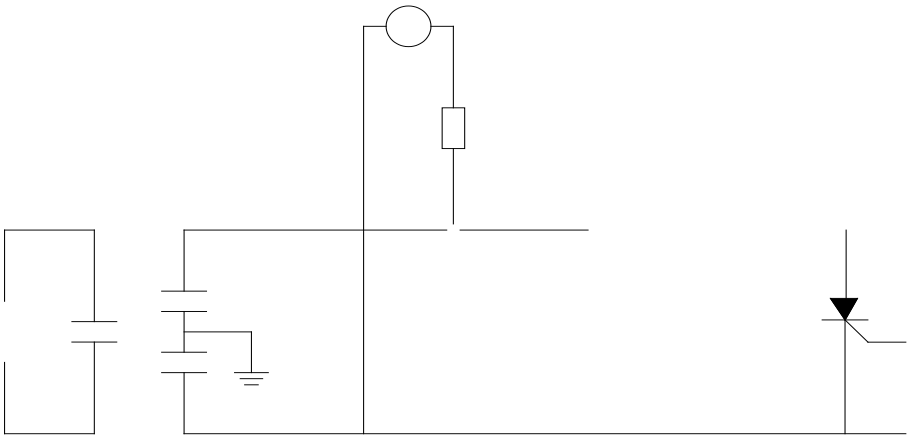
Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	V_D=12V R_L=33Ω	-	-	15	mA
V_{GT}		-	-	1	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3kΩ	0.2	-	-	V
I_L	I_G=1.2I_{GT}	-	-	60	mA
I_H	I_T=500mA	-	-	50	mA
dV/dt	V_D=400V Gate Open T_j=125	500	-	-	V/μs
t_{on}	I_G=40mA I_A=400mA I_R=40mA T_j=25	-	5	-	μs
t_{off}		-	70	-	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM}=40A t_p=380μs	T_j=25	1.55	V
V_{TO}	Threshold voltage	T_j=125	0.74	V
R_D	Dynamic resistance	T_j=125	20	mΩ
I_{DRM}	V_D=V_{DRM} V_{R}ed 0 0 12 146.76 269088 269.04 Tm [( )-2 (V)]TJ 8.04 0 0 8.04 191.28 268.230an <<28 319.92 m (V)Tj 8.04			

JCT620C **JieJie M**

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
JCT620C	600	15	TO-220C	50	Tube

Document Revision History

Date	Revision	Changes
Apr.13, 2023	A.1.0	Last update
Oct.14, 2025		

PACKAGE MECHANICAL DATA



Information furnished in this document is believed to be accurate and reliable.
However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the