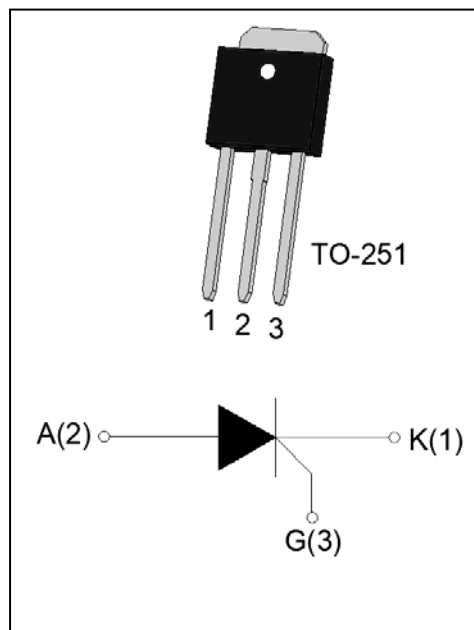


DESCRIPTION:

The JX020H SCR provides high dV/dt rate with strong resistance to electromagnetic interface. It is especially recommended for use on residual current circuit breaker, straight hair, igniter etc. Package TO-251 is RoHS compliant.

MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	2	A
V_{DRM}/V_{RRM}	600	V
I_{GT}	≤ 200	μA



ABSOLUTE MAXIMUM RATINGS

Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage ($T_j=25^\circ C$)	V_{DRM}	600	V
Repetitive peak reverse voltage ($T_j=25^\circ C$)	V_{RRM}	600	V
Average on-state current ($T_c \leq 104^\circ C$)	$I_{T(AV)}$	1.3	A
RMS on-state current ($T_c \leq 104^\circ C$)	$I_{T(RMS)}$	2	A
Non repetitive surge peak on-state current ($t_p=10ms, T_j=25^\circ C$)	I_{TSM}	20	A
Non repetitive surge peak on-state current ($t_p=8.3ms, T_j=25^\circ C$)		22	
I^2t value for fusing ($t_p=10ms, T_j=25^\circ C$)	I^2t	2	A^2s
Critical rate of rise of on-state current ($I_G=2 \times I_{GT}, f=100Hz, T_j=125^\circ C$)	di/dt	50	$A/\mu s$
Peak gate current ($t_p=20\mu s, T_j=125^\circ C$)	I_{GM}	1.2	A
Average gate power dissipation ($T_j=125^\circ C$)	$P_{G(AV)}$	0.2	W



Peak gate power	P_{GM}	2	W
Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.7)	V_{pp}	0.5	kV

Operating junction temperature T_j is up to 125 when a resistor $\leq 1k\Omega$ is connected between Gate and Cathode. Without this resistor, the T_j is up to 110 only.

ELECTRICAL CHARACTERISTICS ($T_j=25$ unless otherwise specified)

I_{GT}	$V_D=12V$ $R_L=33\Omega$	-	50	200	μA
V_{GT}		-	0.6	0.8	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$	0.2	-	-	V
 I_L	$I_G=1.2 I_{GT}$	-	-	6	mA
I_H	$I_T=0.05A$	-	-	5	mA
dV/dt	$V_D=400V$ $T_j=125$ $R_{GK}=1k\Omega$	20	-	-	V/ μs



ORDERING INFORMATION

<u>J</u>	<u>X</u>	<u>020</u>	<u>H</u>
JieJie Microelectronics Co., Ltd.	Sensitive gate SCRs	IT(RMS):2A	H:TO-251

MARKING

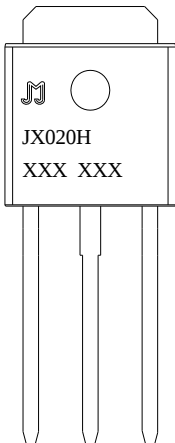
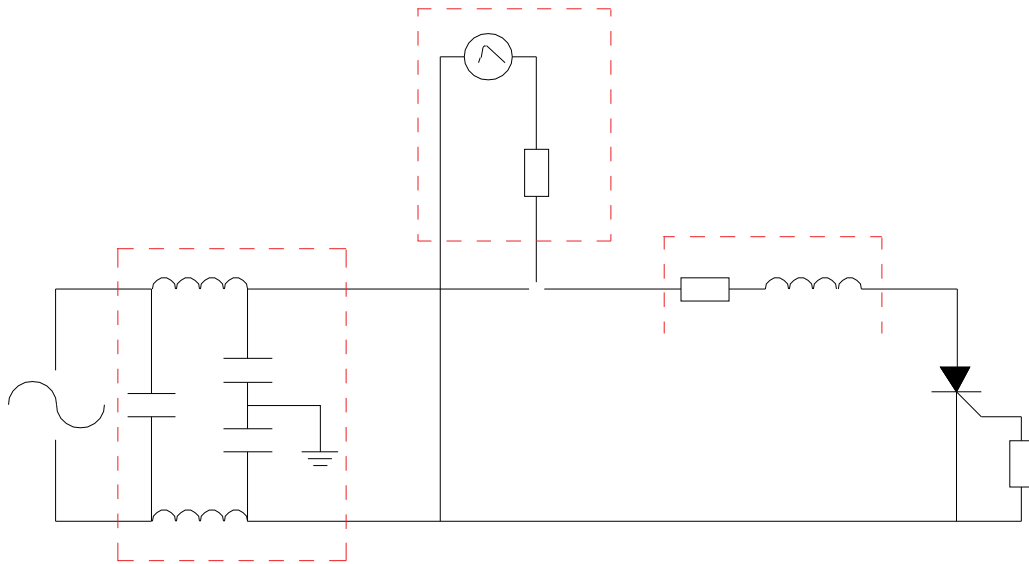
	<table><tr><td><u>XXX</u></td><td><u>XXX</u></td></tr><tr><td>Year</td><td>Production Code</td></tr><tr><td>Month</td><td>Code</td></tr></table>	<u>XXX</u>	<u>XXX</u>	Year	Production Code	Month	Code
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Year	Production Code						
Month	Code						



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





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