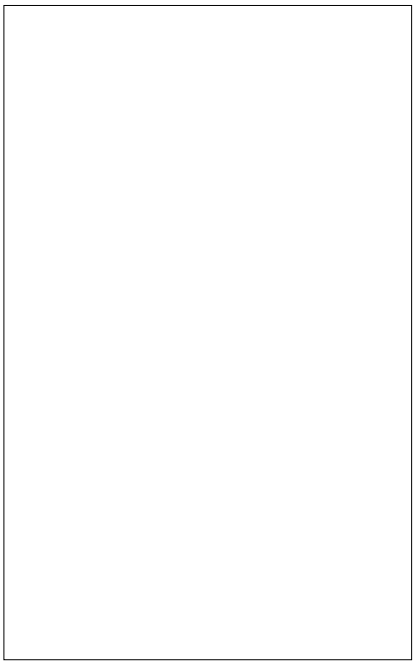
JHX015V 1.5A SCR

Rev.A.1.1

With high ability to withstand the shock loading of large current, JHX015V 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 SOT-223 is RoHS compliant.



Symbol	Value	Unit
$I_{T(RMS)}$	1.5	A
V_{DRM}/V_{RRM}	1600	V
I_{GT}	≤3	mA

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	

-40 Tw 1 1

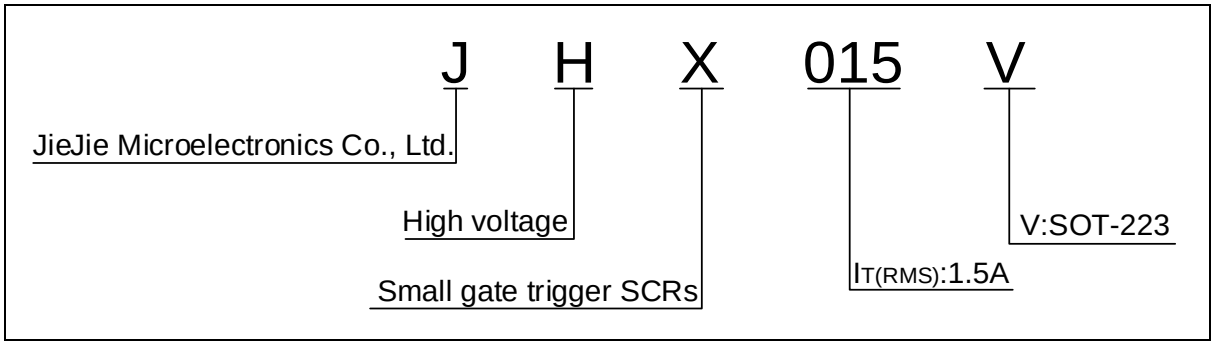
Peak gate power	P_{GM}	2	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.8)	V_{pp}	1.5	kV

(T_j=25 unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	V_D=12V R_L=33Ω	-	-	3	mA
V_{GT}		-	-	1.3	V
V_{GD}	V_D=V_{DRM} T_j=110 R_L=3.3kΩ	0.2	-	-	V
I_L	I_G=1.2I_{GT}	-	-	15	mA
I_H	I_T=500mA	-	-	10	mA
dV/dt	V_D=1070V T_j=110 R_{GK}=1kΩ	100	-	-	V/μs
	V_D=1070V T_j=110 R_{GK}=220Ω	500	-	-	
t_{on}	I_G=10mA I_A=40mA I_R=4mA T_j=25	-	2	-	μs
t_{off}		-	50	-	μs

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM}=3A t_p=380μs	T_j=25	1.7	V
V_{TO}	Threshold voltage	T_j=110	0.91	V
R_D	Dynamic resistance	T_j=110	167	mΩ
I_{DRM}	V_D=V_{DRM} V_R=V_{RRM}	T_j=25	5	μA
I_{RRM}		T_j=110	0.2	mA

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case(DC)	25	/W
$R_{th(j-a)}$	junction to ambient (DC)	65	/W


J
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JieJie Microelectronics Co., Ltd.
High voltage
Small gate trigger SCRs
IT(RMS):1.5A
V:SOT-223

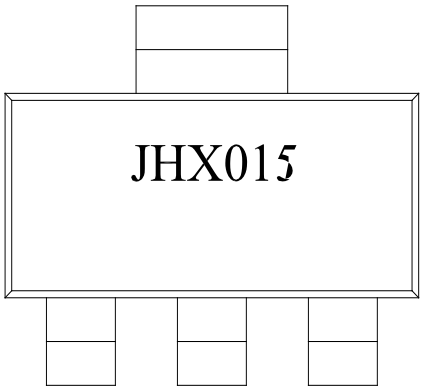

JHX015

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

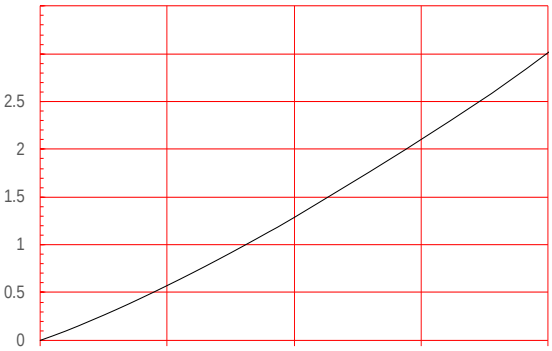
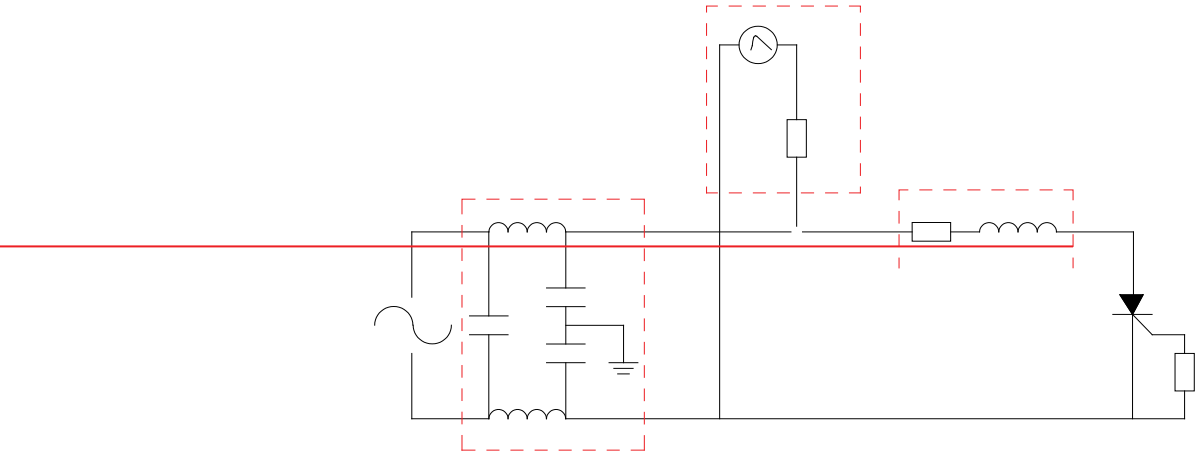


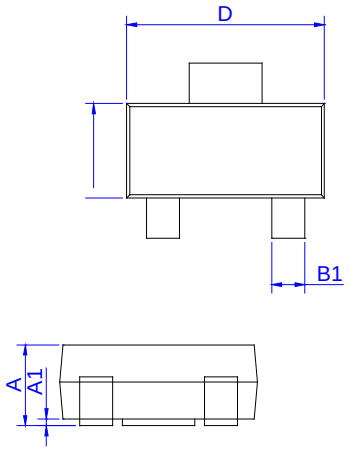
FIG.2: RMS on-state current versus case temperature

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.



Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	1.50	1.60	1.80	0.059	0.063	0.071
A1	0.01	0.06	0.10	0.001	0.002	0.004
B	2.90	3.00	3.10	0.114	0.118	0.122
B1	0.60	0.70	0.80	0.024	0.028	0.031
C	0.22	0.26	0.32	0.009	0.010	0.013
D	6.30	6.50	6.70	0.248	0.256	0.264
E	3.30	3.50	3.70	0.130	0.138	0.146
F	4.40			0.173		
F1	2.20			0.087		
G	0.50		1.00	0.020		0.039
H	1.50	1.75	2.00	0.059	0.069	0.079
J	6.70	7.00	7.30	0.264	0.276	0.287
K						

Dimensions						
Ref.	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.

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