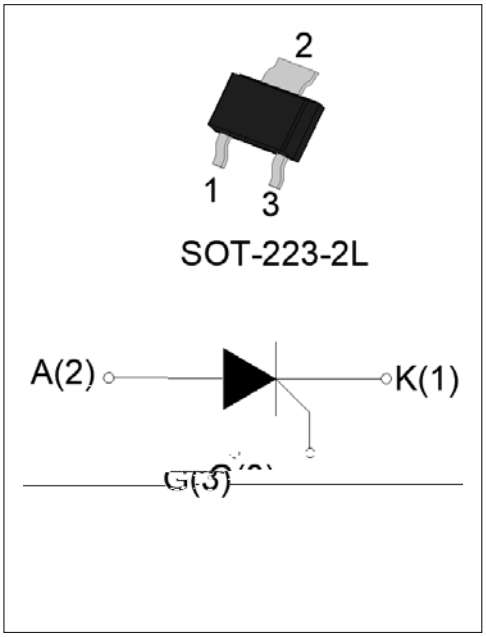
JX013W 1A Sensitive SCR

Rev.A.1.1

The JX013W 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 SOT-223-2L is RoHS compliant.



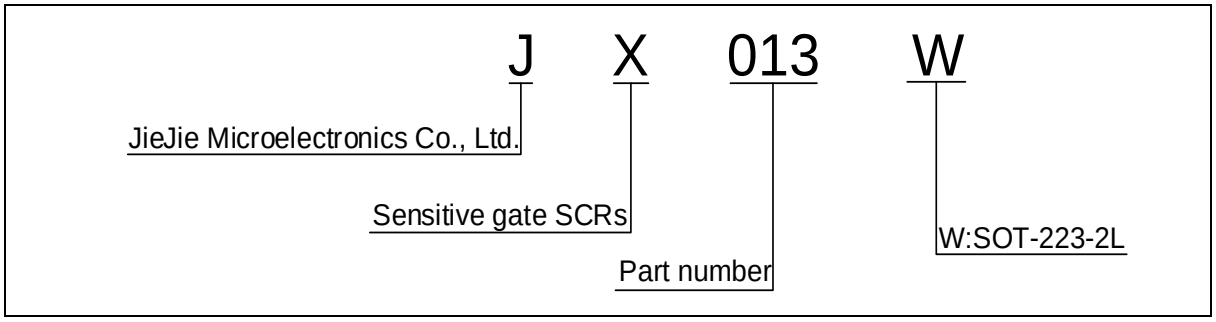
Symbol	Value	Unit
$I_{T(RMS)}$	1	A
V_{DRM} /V_{RRM}	1200	V
I_{GT}	≤200	μA

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-110	
Repetitive peak off-state voltage (T_j=25)	V_{DRM}	1200	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	1200	V
Average on-state current ($T_C \leq$ 74)	$I_{T(AV)}$	0.6	A
RMS on-state current ($T_C \leq$ 74)	$I_{T(RMS)}$	1	A
Non repetitive surge peak on-state current (t_p=10ms , T_j=25)	I_{TSM}	17	A
Non repetitive surge peak on-state current (t_p=8.3ms , T_j=25)		19	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	1.4	A^2s
Critical rate of rise of on-state current (I_G=2 I_{GT} , f=100Hz , T_j=110)	dI/dt	100	A/μs
Peak gate current (t_p=20μs, T_j=110)	I_{GM}	1	A
Average gate power dissipation (T_j=110)	$P_{G(AV)}$	0.1	W
Peak gate power	P_{GM}	2	W

Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.8)	V_{pp}	1	kV

(T_j=25 unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	V_D=12V R_L=33Ω	-	-	200	μA
V_{GT}		-	0.6	0.8	V
V_{GD}	V_D=V_{DRM} T_j=1				


J X 013 W
JieJie Microelectronics Co., Ltd.
Sensitive gate SCRs
Part number
W:SOT-223-2L

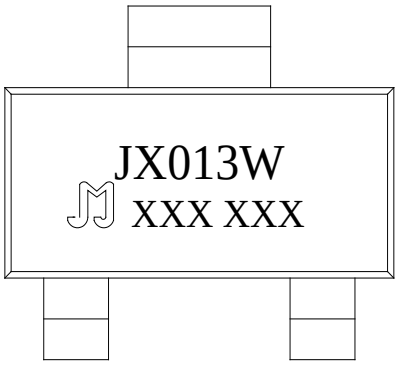

JX013W
XXX XXX

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

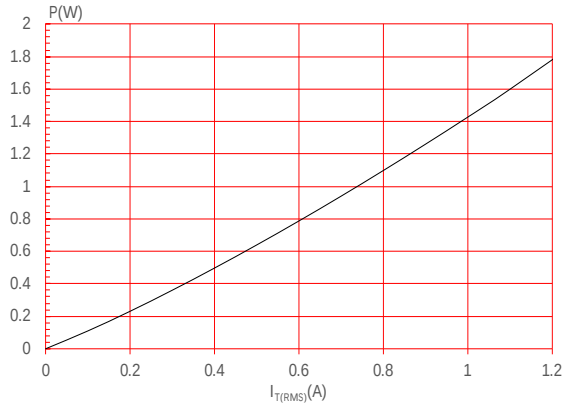
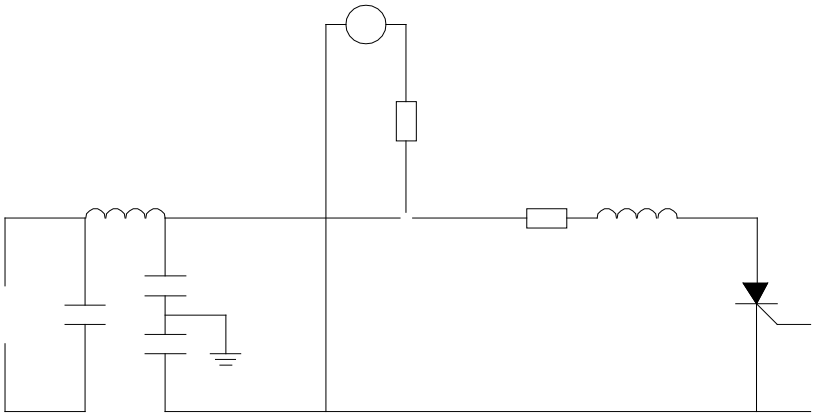


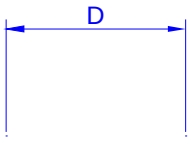
FIG.2: RMS on-state current versus case temperature

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

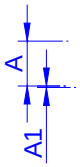
FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.



Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(μA)	Package	Base qty. (pcs)	Delivery mode


D


B1


A
A1

