



JCT1675IS 75A SCR

Rev.A.1.1

DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT1675IS SCR provides high dV/dt rate with strong resistance to electromagnetic interference. It is especially recommended for use on solid state relay, UPS, SVC, power charger, T-tools etc. From all three terminals to external heatsink, JCT1675IS provides a rated insulation voltage of 2500 V_{RMS} , Package ITO-247 is RoHS compliant.



MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	75	A

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
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}	1600	V
Repetitive peak reverse voltage ($T_j=25^\circ C$)	V_{RRM}	1600	V
Average on-state current ($T_c=66^\circ C$)	$I_{T(AV)}$	48	A
RMS on-state current ($T_c=66^\circ C$)	$I_{T(RMS)}$	75	A
Non repetitive surge peak on-state current ($t_p=10ms, T_j=25^\circ C$)	I_{TSM}	700	A
Non repetitive surge peak on-state current ($t_p=8.3ms, T_j=25^\circ C$)		750	
I^2t value for fusing ($t_p=10ms, T_j=25^\circ C$)	I^2t	2450	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	200	$A/\mu s$

Peak gate current ($t_p=20\mu s$, $T_j=125$)	I_{GM}	12	A
Average gate power dissipation ($T_j=125$)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	22	W
Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.7)	V_{pp}	1	kV

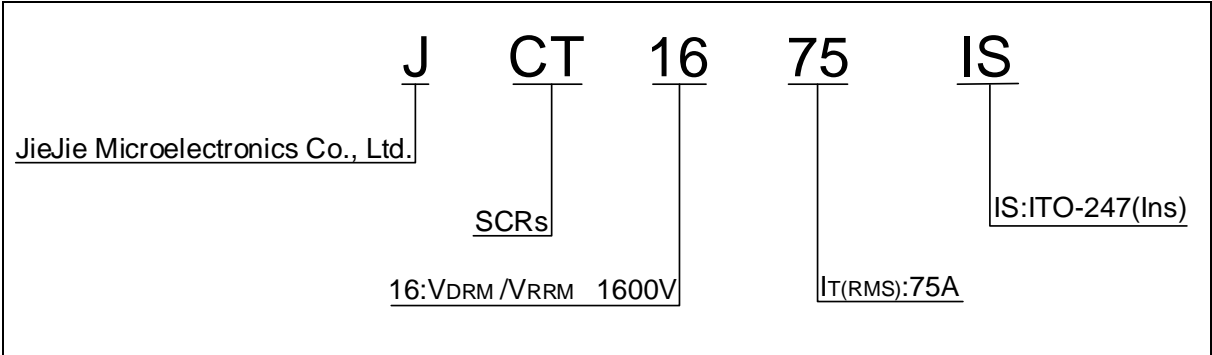
ELECTRICAL CHARACTERISTICS (unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	$V_D=12V$ $R_L=33$	10	-	80	mA
V_{GT}		-	-	1.3	V
V_{GD}	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k$	0.25	-	-	V
I_L	$I_G=1.2I_{GT}$	-	-	250	mA
I_H	$I_T=500mA$	-	-	200	mA
dV/dt	$V_D=1070V$ Gate Open $T_j=125$	2000	-	-	V/ μs
t_{on}	$I_G=100mA$ $I_A=1A$ $I_R=100mA$ $T_j=25$	-	8	-	μs
t_{off}		-	150	-	

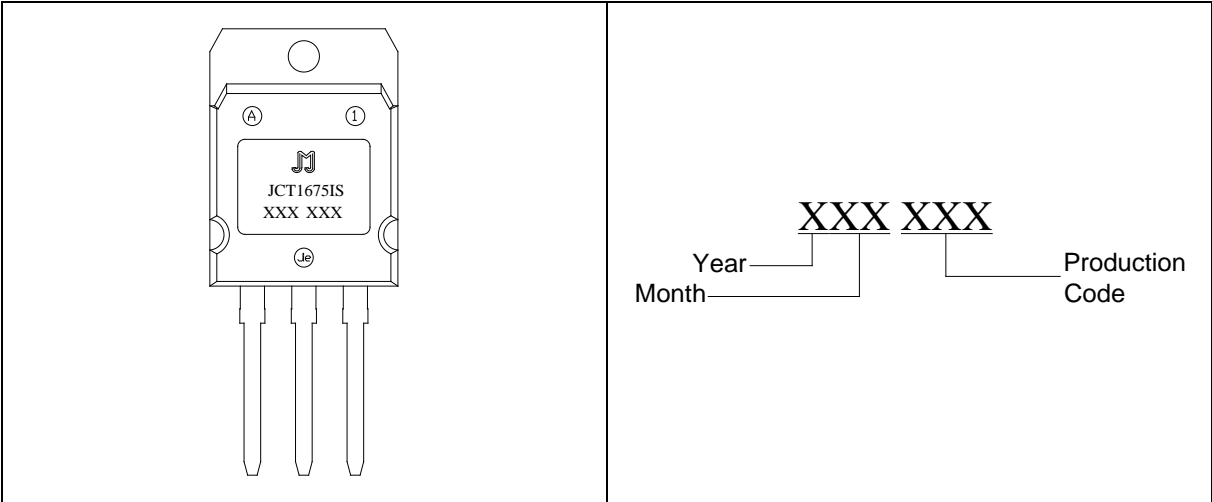
STATIC CHARACTERISTICS

Symbol	Parameter	Value(MAX.)	Unit
V_{TM}	$I_{TM}=100A$ t_p		

ORDERING INFORMATION



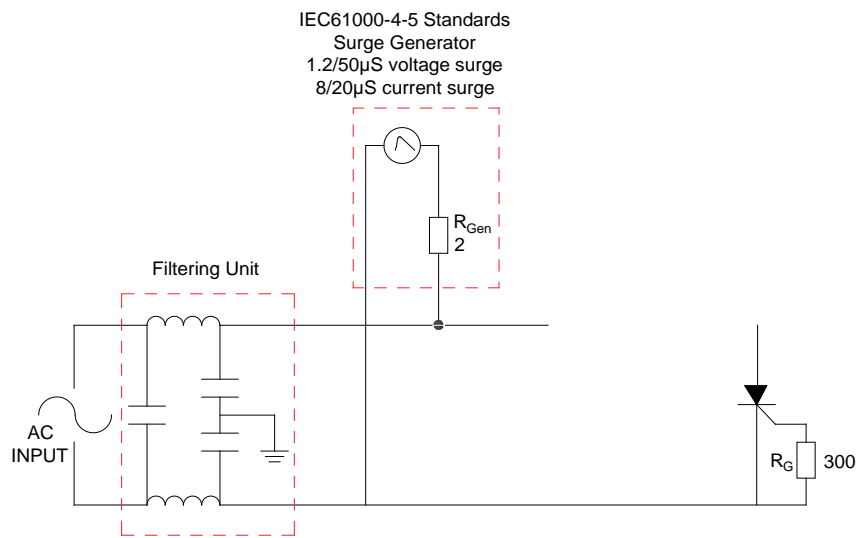
MARKING



JCT1675IS

JieJie Microelectronics Co., Ltd.

.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)	
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JCT1675IS

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