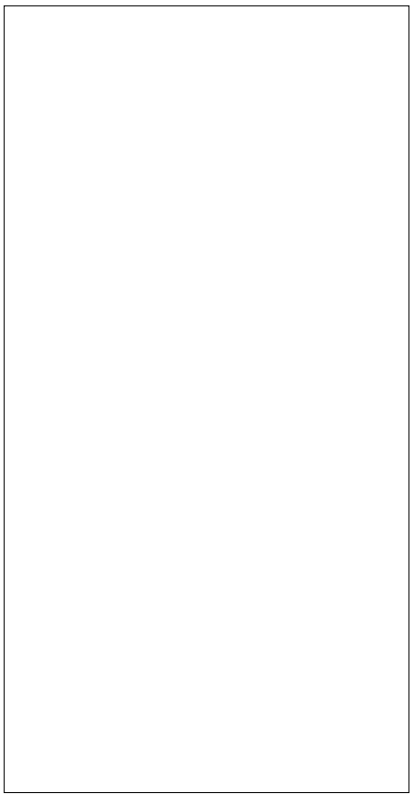
JCT1675IS 75A SCR

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)	V_{DRM}	1600	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	1600	V
Average on-state current ($T_C \leq$ 66)	$I_{T(AV)}$	48	A
RMS on-state current ($T_C \leq$ 66)	$I_{T(RMS)}$	75	A
Non repetitive surge peak on-state current (t_p=10ms, T_j=25)	I_{TSM}	700	A
Non repetitive surge peak on-state current (t_p=8.3ms, T_j=25)		750	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	2450	A^2s
Critical rate of rise of on-state current (I_G=2× I_{GT}, f=100Hz , T_j=125)	dI/dt	200	A/μs

Peak gate current (t_p=20μs , 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

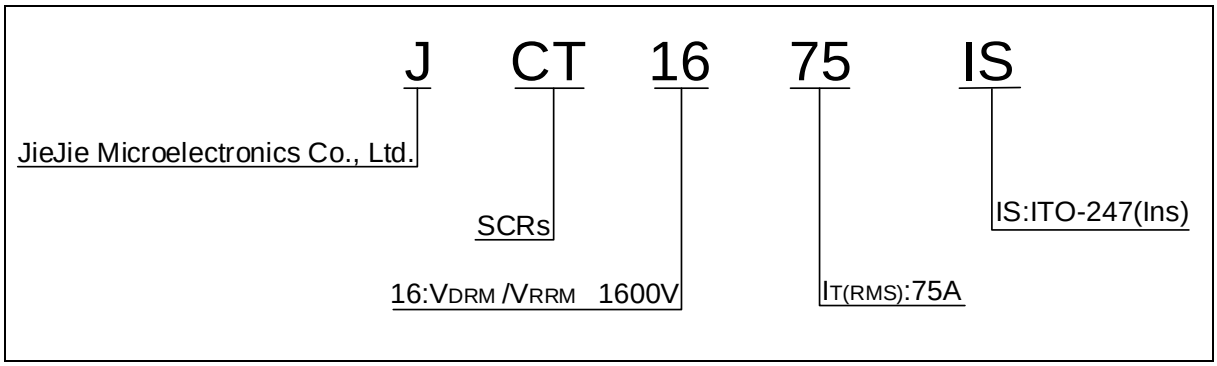
ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Value			Unit
		MIN.	TYP.	MAX.	
I_{GT}	V_D=12V R_L=33Ω	10	-	80	mA
V_{GT}		-	-	1.3	V
V_{GD}	V_D=V_{DRM} T_j=125 R_L=3.3kΩ	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	-	

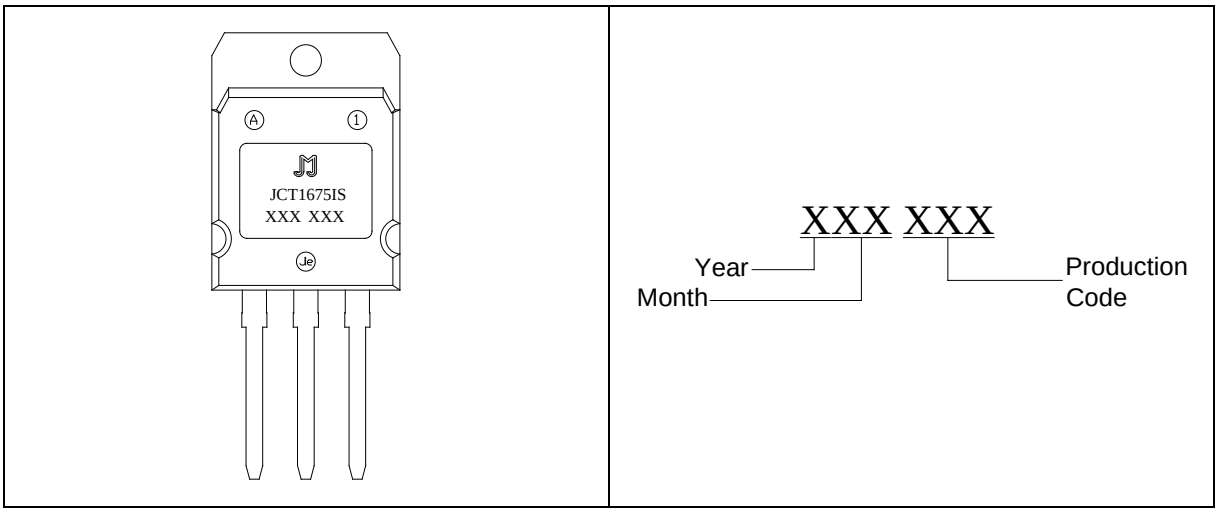
STATIC CHARACTERISTICS

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

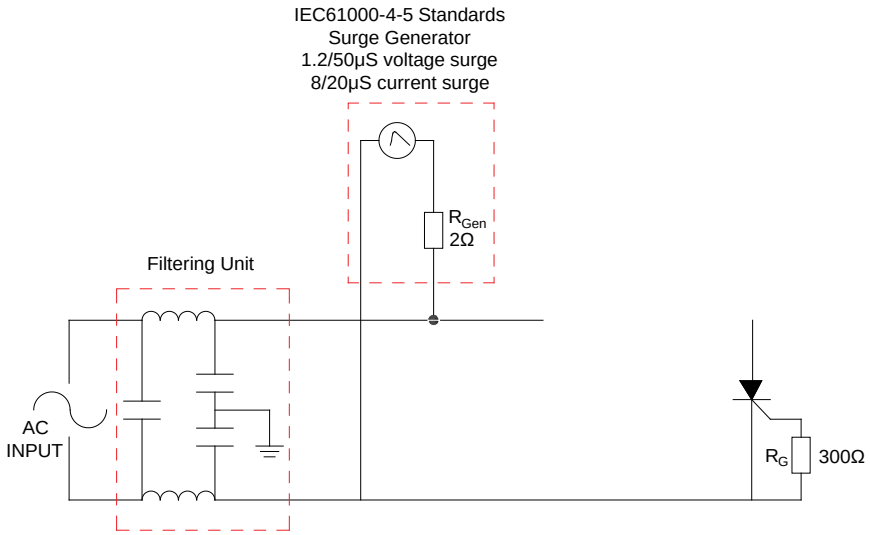
ORDERING INFORMATION



MARKING



.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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