JCT612CH 12A SCR

Rev.A.1.1

DESCRIPTION:

With high a b ility to withstand the loading
of large current, JCT 612CH is designed
ectfies sides high dV/dt rate with high
esistance to electromagnetic interference.
It is especially recommended for use on
home appliances, power charger,
T-set. Package TO -220C is RoHS compliant

MAIN FEATURES

Sym	Valu	Unit b
$I_{T(RMS)}$	12	A
V_{DRM}/V_{RRM}	600	V
I_{GT}	≤15	mA

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-150	
Repetitive peak off-state voltage (Tj=25)	V_{DRM}	600	V
Repetitive peak reverse voltage (Tj=25)	V_{RRM}	600	V
Average on-state current (TC ≤ 134)	$I_{T(AV)}$	7.6	A
RMS on-state current (TC ≤ 134)	$I_{T(RMS)}$	12	A
Non repetitive surge peak on-state current (tp=10ms, Tj=25)	I_{TSM}	140	A
Non repetitive surge peak on-state current (tp=8.3ms, Tj=25)		154	

Average gate power dissipation (T$_J$=150)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W
Peak gate voltage (T$_J$=25 ; non-repetitive, t_p=20μs; FIG.7)	V_{FGM}	0.5	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	-	-	15	mA

ORDERING INFORMATION

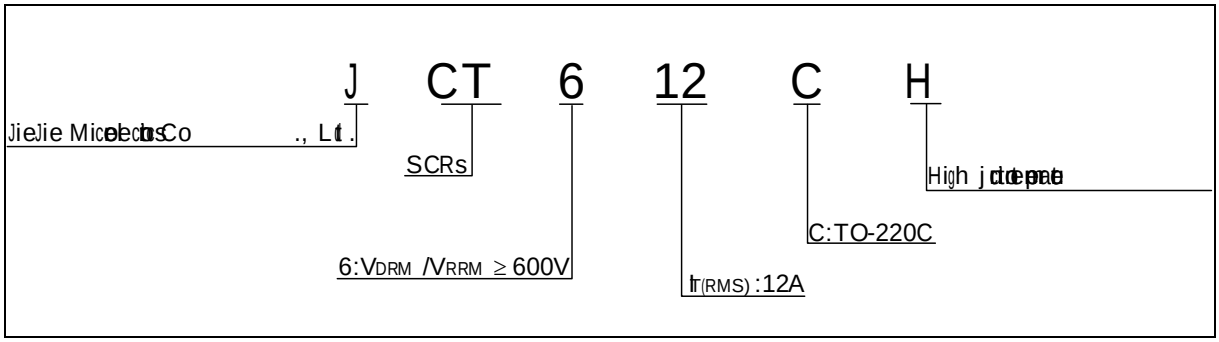


FIG.1: Maximum power dissipation vs RMS on-state current

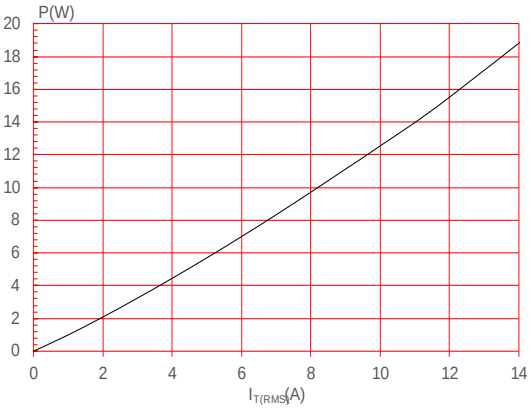
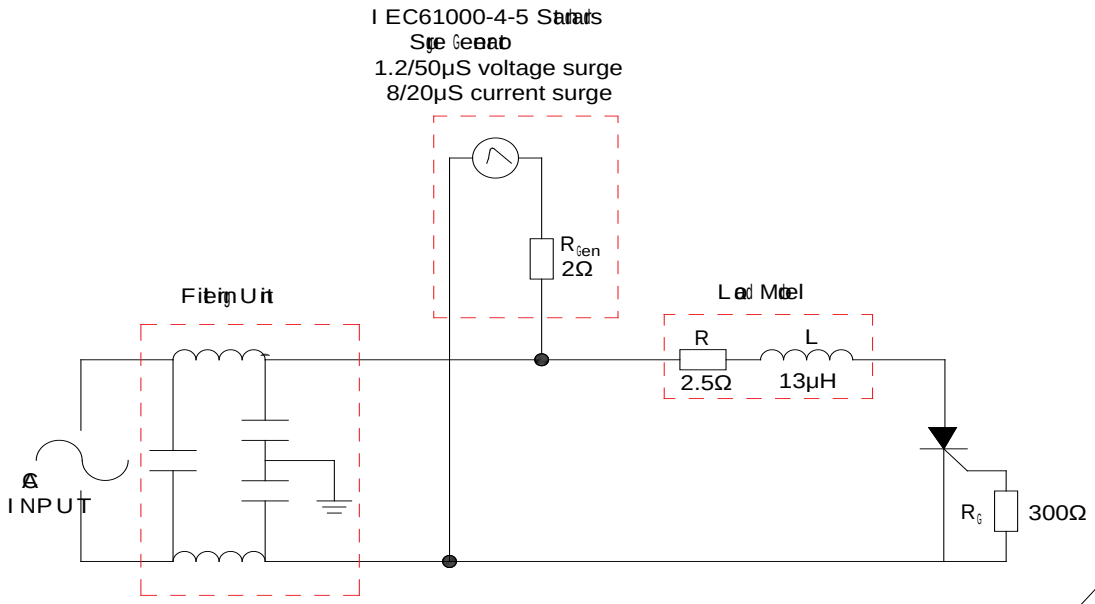


FIG.2: RMS on-state current vs case temperature

0

FIG.7 Test circuit for the test of IEC -61000-4-5 standard



ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT612CH	600	15	TO-220C	50	Tube

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