JCT812CH 12A SCR

Rev.A.1.1

DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT812CH of silicon controlled rectifiers 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 TO-220C is RoHS compliant.

MAIN FEATURES

Symbol	Value	Unit
I24 (S(26 Tw (c 06Tw (M)-4w 3.3()8 533.4 0.481 0..012 Tw 8.3		

Average gate power dissipation (T_j=150)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	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=33	-	-	15	mA
V_{GT}		-	-	1	V
V_{GD}	V_D=V_{DRM} T_j=150 R_L=3.3k	0.2	-	-	V
I_L	I_G=1.2I_{GT}	-	-	60	mA
I_H	I_T=500mA	-	-	50	mA
dV/dt	V_D=540V Gate Open T_j=125	1800	-	-	V s
	V_D=540V Gate Open T_j=150	900	-	-	
t_{on}	I_G=20mA I_A=200mA I_R=20mA T_j=25	-	5	-	s
t_{off}		-	80	-	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM}=24A t_p=380 s	T_j=25	1.5	V
V_{TO}	Threshold voltage	T_j=150	0.74	V

ORDERING INFORMATION

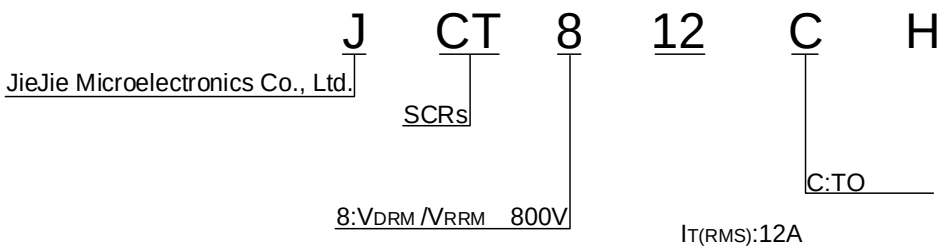


FIG.1: Maximum power dissipation versus RMS on-state current

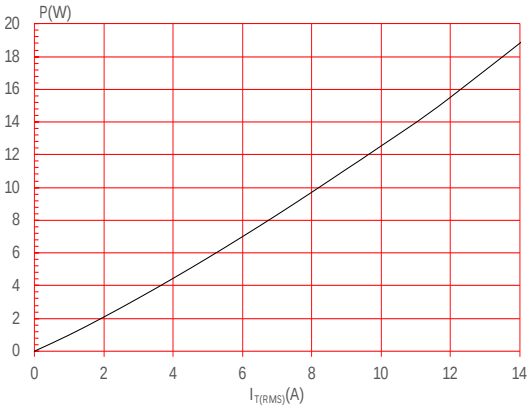


FIG.2: RMS on-state current versus case temperature

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FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.

