



DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT1208C provides high dV/dt rate with strong resistance to electromagnetic interference. It is especially recommended for use on hair straightener motorcycle voltage regulator etc. Package TO-220C is RoHS compliant.



MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	8	A
V_{DRM}/V_{RRM}	1200	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	-40-125	
Repetitive peak off-state voltage ($T_j=25^\circ C$)	V_{DRM}	1200	V
Repetitive peak reverse voltage ($T_j=25^\circ C$)	V_{RRM}	1200	V
Average on-state current ($T_c = 103^\circ C$)	$I_{T(AV)}$	5	A
RMS on-state current ($T_c = 103^\circ C$)	$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current ($t_p=10ms, T_j=25^\circ C$)	I_{TSM}	85	A
Non repetitive surge peak on-state current ($t_p=8.3ms, T_j=25^\circ C$)		94	
I^2t value for fusing ($t_p=10ms, T_j=25^\circ C$)	I^2t	36	A^2s
Critical rate of rise of on-state current ($I_G=2 I_{GT}, f=100Hz, T_j=125^\circ C$)	di/dt	100	$A/\mu s$
Peak gate current ($t_p=20\mu s, T_j=125^\circ C$)	I_{GM}	4	A
Average gate power dissipation ($T_j=125^\circ C$)	$P_{G(AV)}$	1	W

Peak gate power	P_{GM}	5	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
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JCT1208C

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

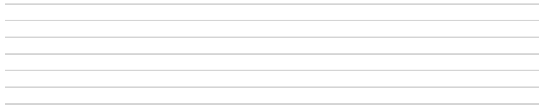
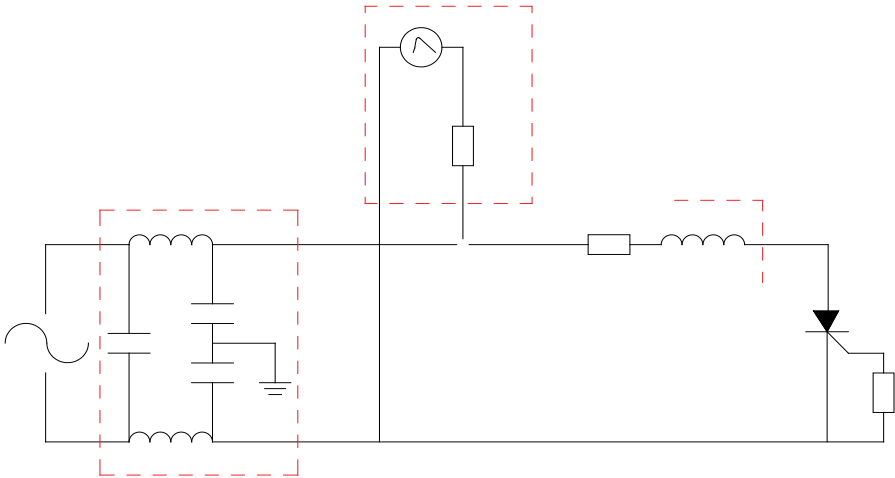



FIG.2: RMS on-state current versus case temperature

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



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