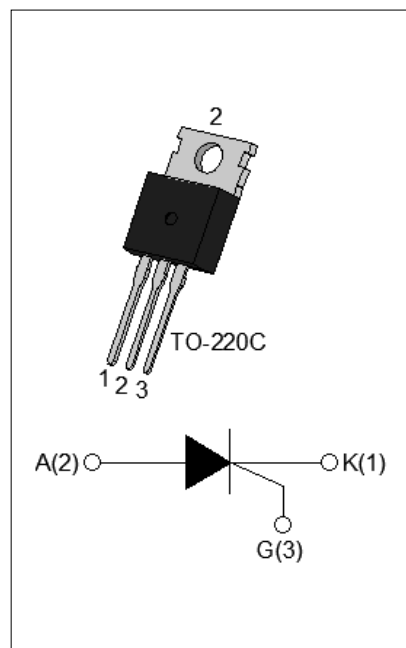




With high ability to withstand the shock loading of large current, JCT1240C SCR provides high  $dV/dt$  rate with strong resistance to electromagnetic interference. It is especially recommended for use on solid state relay, motorcycle, power charger, T-tools etc. Package TO-220C is RoHS compliant.

Symbol	Value	Unit
$I_{T(RMS)}$	40	A
$V_{DRM}/V_{RRM}$	1200	V
$I_{GT}$	45	mA



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 ( $T_j=25^\circ\text{C}$ )	$V_{DRM}$	1200	V
Repetitive peak reverse voltage ( $T_j=25^\circ\text{C}$ )	$V_{RRM}$	1200	V
Average on-state current ( $T_c = 96^\circ\text{C}$ )	$I_{T(AV)}$	25	A
RMS on-state current ( $T_c = 96^\circ\text{C}$ )	$I_{T(RMS)}$	40	A
Non repetitive surge peak on-state current ( $t_p=10\text{ms}, T_j=25^\circ\text{C}$ )	$I_{TSM}$	500	A
Non repetitive surge peak on-state current ( $t_p=8.3\text{ms}, T_j=25^\circ\text{C}$ )		540	
$I^2t$ value for fusing ( $t_p=10\text{ms}, T_j=25^\circ\text{C}$ )	$I^2t$	1250	$\text{A}^2\text{s}$
Critical rate of rise of on-state current ( $I_G=2 I_{GT}, f=100\text{Hz}, T_j=125^\circ\text{C}$ )	$di/dt$	200	$\text{A}/\mu\text{s}$
Peak gate current ( $t_p=20\mu\text{s}, T_j=125^\circ\text{C}$ )	$I_{GM}$	10	A
Average gate power dissipation ( $T_j=125^\circ\text{C}$ )	$P_{G(AV)}$	1	W





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

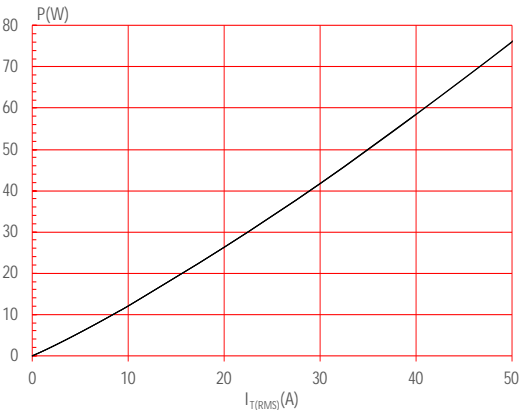
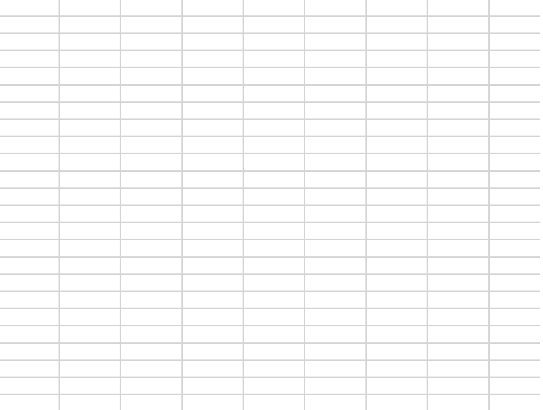


FIG.2: RMS on-state current versus case temperature

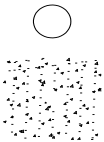




Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT1240C	1200	45	TO-220C	50	Tube

**Document Revision History**

Date	Revision	Changes
Apr.13, 2023	A.1.0	Last update
Oct.14, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA



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