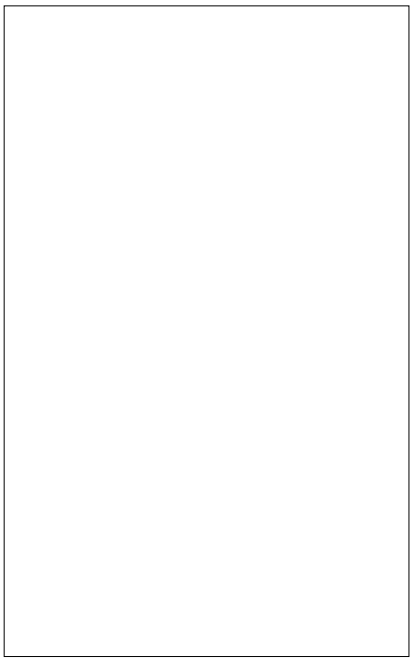
## JCT840CH 40A SCR

Rev.A.1.1

## DESCRIPTION:

With high ability to withstand the shock loading of large current, JCT840CH 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.

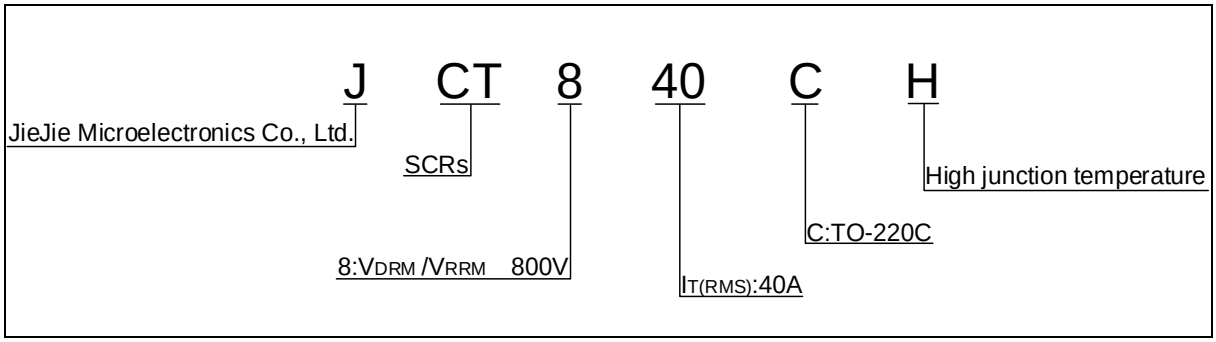


## MAIN FEATURES

## 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 ($T_j$=25 ) | $V_{DRM}$ | 800 | V |
| Repetitive peak reverse voltage ($T_j$=25 ) | $V_{RRM}$ | 800 | V |
| Average on-state current ($T_C$ 134 ) | $I_{T(AV)}$ | 25 | A |
| RMS on-state current ($T_C$ 134 ) | $I_{T(RMS)}$ | 40 | A |
| Non repetitive surge peak on-state current ($t_p$=10ms, $T_j$=25 ) | $I_{TSM}$ | 500 | A |
| Non repetitive surge peak on-state current ($t_p$=8.3ms, $T_j$=25 ) | | 540 | |
| $I^2t$ value for fusing ($t_p$=10ms , $T_j$=25 ) | $I^2t$ | 1250 | $A^2s$ |
| Critical rate of rise of on-state current ($I_G$=2× $I_{GT}$, f=100Hz , $T_j$=150 ) | dI/dt | 1 0 | A/μs |
| Peak gate current ($t_p$=20μs , $T_j$=150 ) | $I_{GM}$ | 10 | A |
| Average gate power dissipation ($T_j$=150 ) | $P_{G(AV)}$ | 1 | W |

## ORDERING INFORMATION




## MARKING

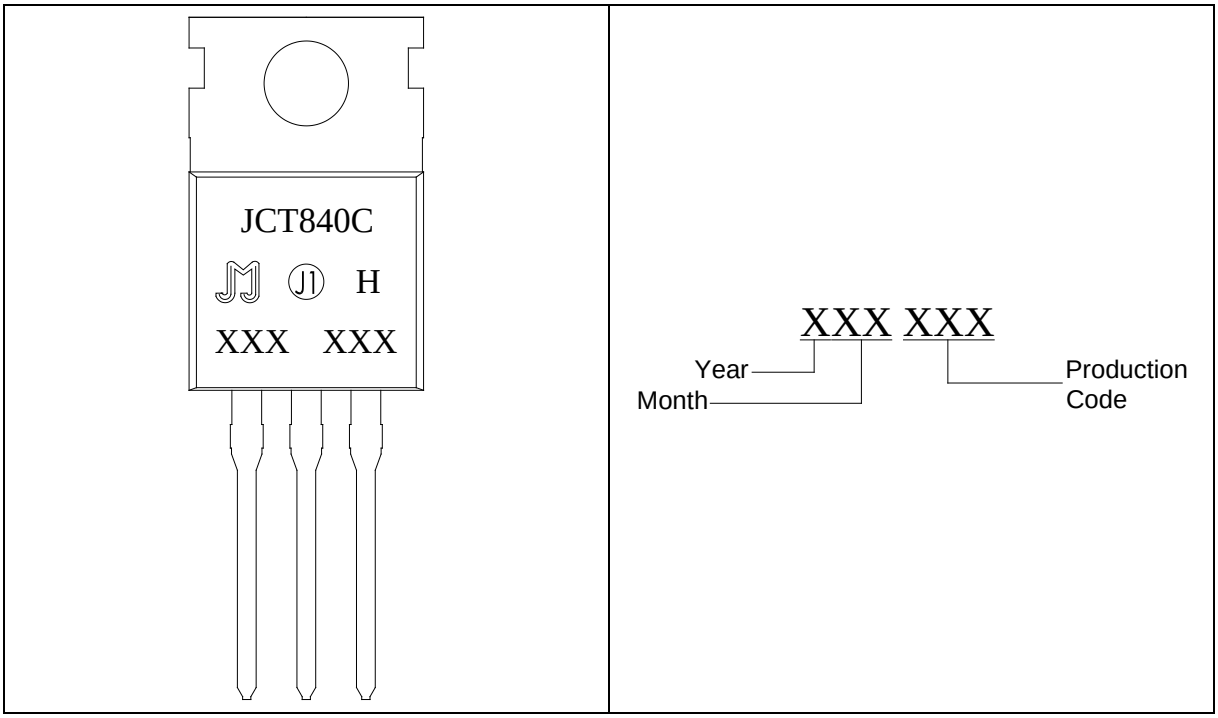


**FIG.1:** Maximum power dissipation versus RMS on-state current

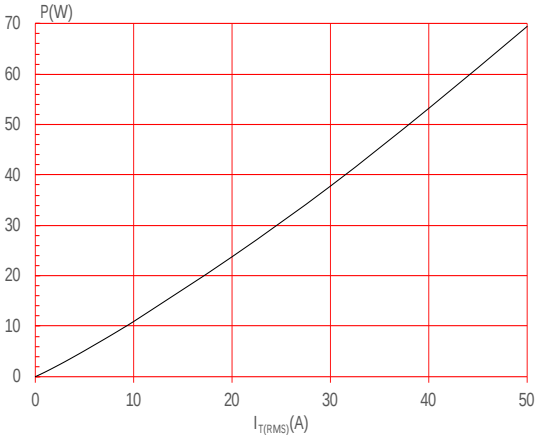



**FIG.2:** RMS on-state current versus case temperature