

JCT1640A 40A SCR

Rev.A.1.1

**DESCRIPTION:**

With high ability to withstand the shock loading of large current, JCT1640A 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. From all three terminals to external heatsink, JCT1640A provides a rated insulation voltage of 2500  $V_{RMS}$ , complying with UL standards (File ref: E252906). Package TO-220A is RoHS compliant.

**MAIN FEATURES**

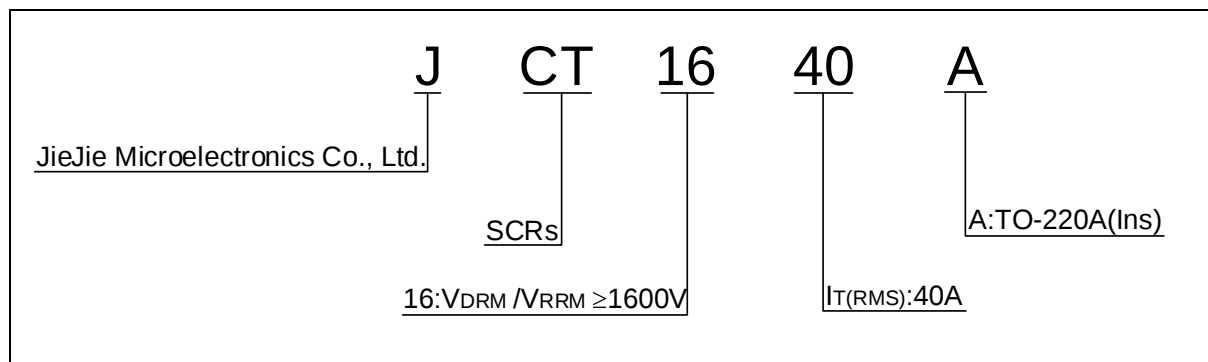
| Symbol       | Value | Unit |
|--------------|-------|------|
| $I_{T(RMS)}$ | 40    | A    |

 $V_{DRM}/V_{RRM}$ **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 ( $T_j=25^\circ\text{C}$ )                                                     | $V_{DRM}$    | 1600    | V      |
| Repetitive peak reverse voltage ( $T_j=25^\circ\text{C}$ )                                                       | $V_{RRM}$    | 1600    | V      |
| Average on-state current ( $T_c 0.54^\circ\text{C}$ )                                                            | $I_{T(AV)}$  | 25      | A      |
| RMS on-state current ( $T_c 0.54^\circ\text{C}$ )                                                                | $I_{T(RMS)}$ | 40      | A      |
| Non repetitive surge peak on-state current ( $t_p=10\text{ms}$ , $T_j=25^\circ\text{C}$ )                        | $I_{TSM}$    | 400     | A      |
| Non repetitive surge peak on-state current ( $t_p=8.3\text{ms}$ , $T_j=25^\circ\text{C}$ )                       |              | 430     |        |
| $I^2t$ value for fusing ( $t_p=10\text{ms}$ , $T_j=25^\circ\text{C}$ )                                           | $I^2t$       | 800     | $A^2s$ |
| Critical rate of rise of on-state current ( $I_G=2 \times I_{GT}$ , $f=100\text{Hz}$ , $T_j=125^\circ\text{C}$ ) | $di/dt$      | 200     | A/s    |



## ORDERING INFORMATION



## MARKING

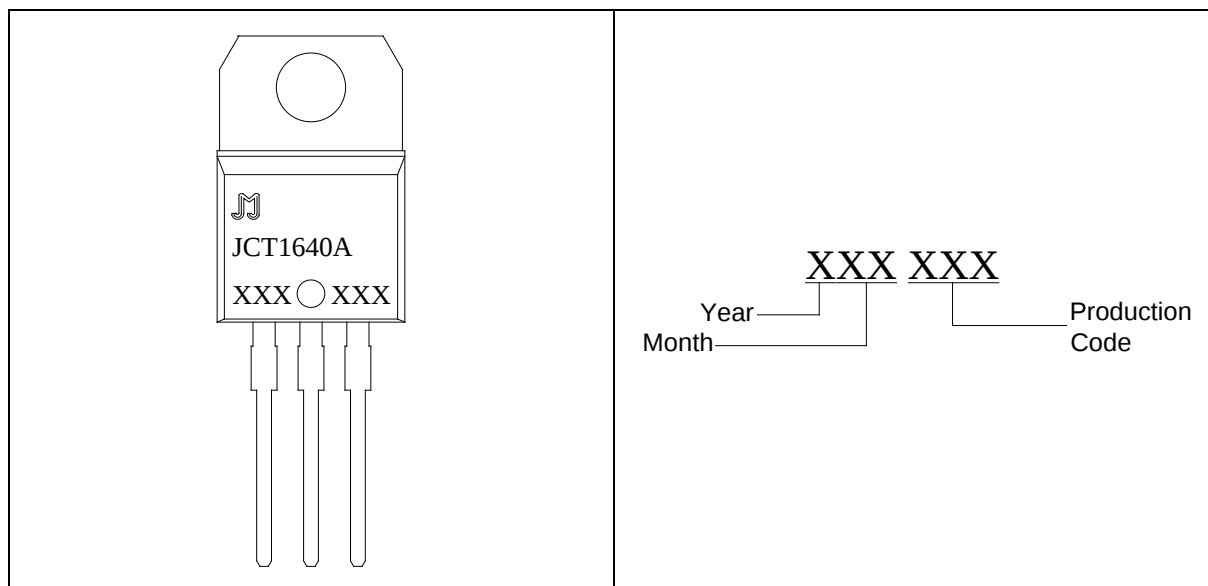


FIG.1: Maximum power dissipation versus  
RMS on-state current

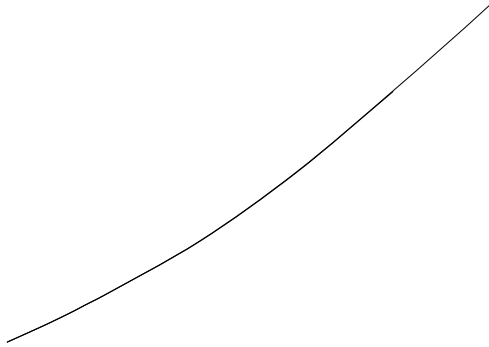


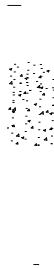
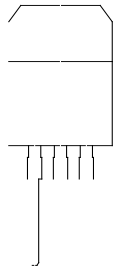
FIG.2: RMS on-state current versus case  
temperature

JCT1640A

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PACKAGE MECHANICAL DATA



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