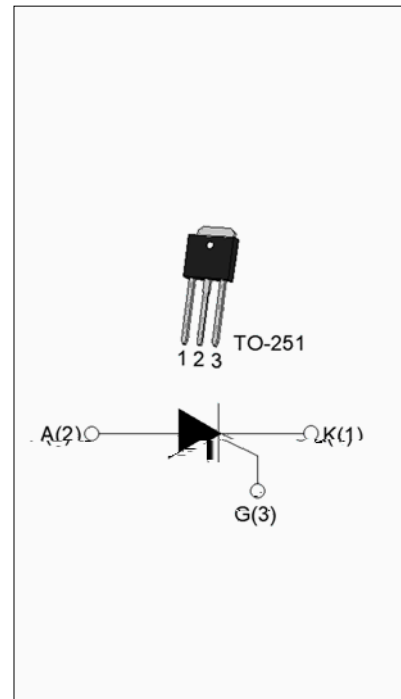


**DESCRIPTION:**

With high ability to withstand the shock loading of large current, JCT816HH 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-251 is RoHS compliant.

**MAIN FEATURES**

| Symbol            | Value     | Unit |
|-------------------|-----------|------|
| $I_{T(RMS)}$      | 16        | A    |
| $V_{DRM}/V_{RRM}$ | 800       | V    |
| $I_{GT}$          | $\leq 15$ | mA   |

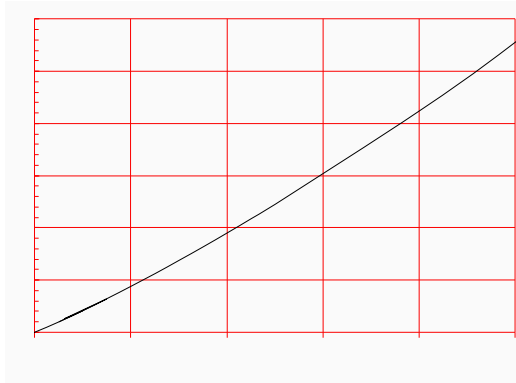
**ABSOLUTE MAXIMUM RATINGS**

| 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 ( $T_j=25^\circ\text{C}$ )                                                     | $V_{DRM}$    | 800     | V                      |
| Repetitive peak reverse voltage ( $T_j=25^\circ\text{C}$ )                                                       | $V_{RRM}$    | 800     | V                      |
| Average on-state current ( $T_c \leq 132^\circ\text{C}$ )                                                        | $I_{T(AV)}$  | 10      | A                      |
| RMS on-state current ( $T_c \leq 132^\circ\text{C}$ )                                                            | $I_{T(RMS)}$ | 16      | A                      |
| Non repetitive surge peak on-state current ( $t_p=10\text{ms}$ , $T_j=25^\circ\text{C}$ )                        | $I_{TSM}$    | 150     | A                      |
| Non repetitive surge peak on-state current ( $t_p=8.3\text{ms}$ , $T_j=25^\circ\text{C}$ )                       |              | 165     |                        |
| $I^2t$ value for fusing ( $t_p=10\text{ms}$ , $T_j=25^\circ\text{C}$ )                                           | $I^2t$       | 113     | $\text{A}^2\text{s}$   |
| Critical rate of rise of on-state current ( $I_G=2 \times I_{GT}$ , $f=100\text{Hz}$ , $T_j=150^\circ\text{C}$ ) | $di/dt$      | 150     | $\text{A}/\mu\text{s}$ |
| Peak gate current ( $t_p=20\mu\text{s}$ , $T_j=150^\circ\text{C}$ )                                              | $I_{GM}$     | 5       | A                      |



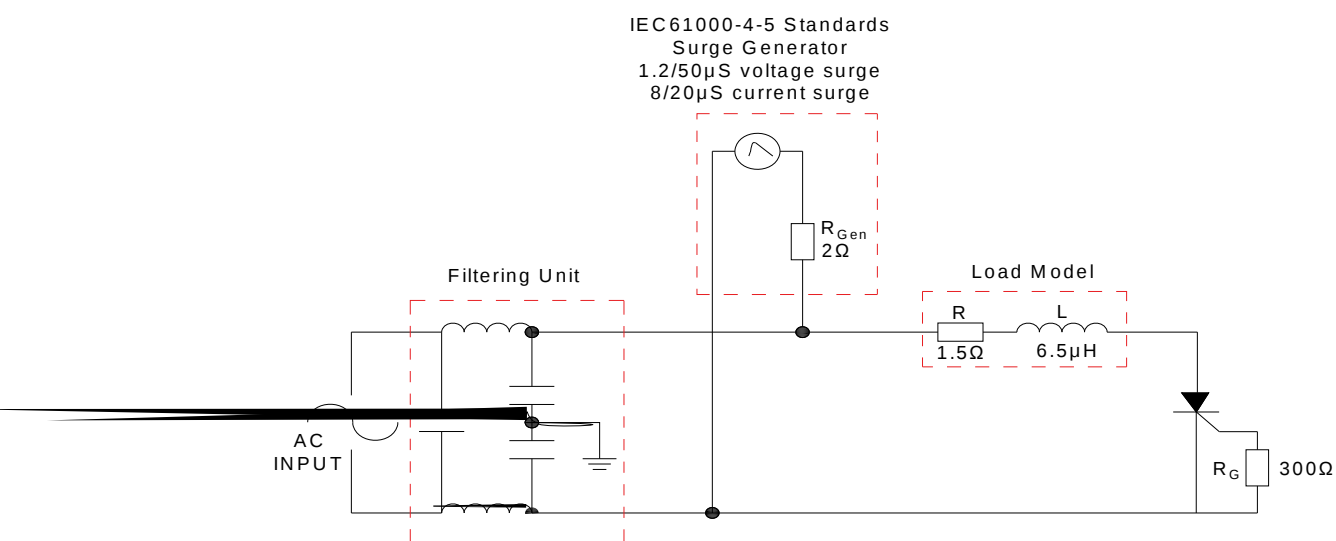


**FIG.1:** Maximum power dissipation versus RMS on-state current



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

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



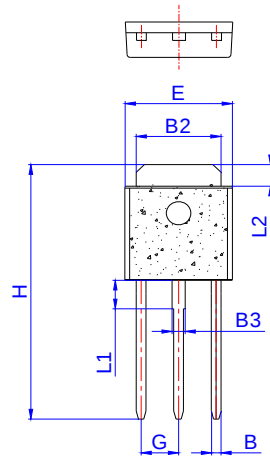
**ORDERING INFORMATION**

| Order code | Voltage<br>$V_{\text{DRM}}/V_{\text{RRM}}$ (V) | IGT(mA) | Package | Base qty.<br>(pcs) | Delivery<br>mode |
|------------|------------------------------------------------|---------|---------|--------------------|------------------|
| JCT816HH   | 800                                            | 15      | TO-251  | 80                 | Tube             |

**Document Revision History**

| Date         | Revision | Changes                        |
|--------------|----------|--------------------------------|
| Jun.15, 2023 | A.1.0    | Last update                    |
| Oct.17, 2025 | A.1.1    | Revise PACKAGE MECHANICAL DATA |

PACKAGE MECHANICAL DATA



Dimensions

Information furnished in this doc