

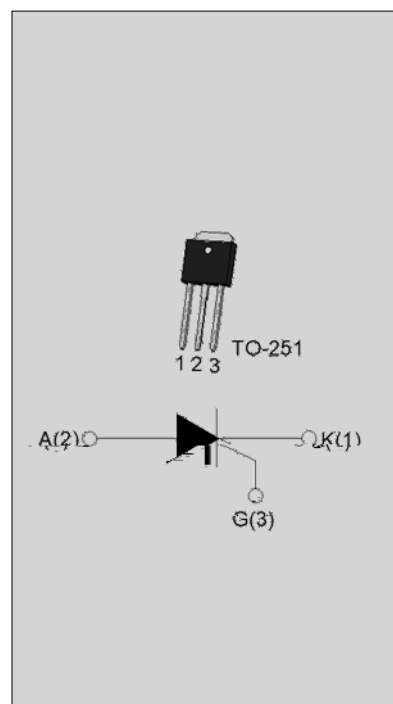


DESCRIPTION:

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}	≤ 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	A^2s
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

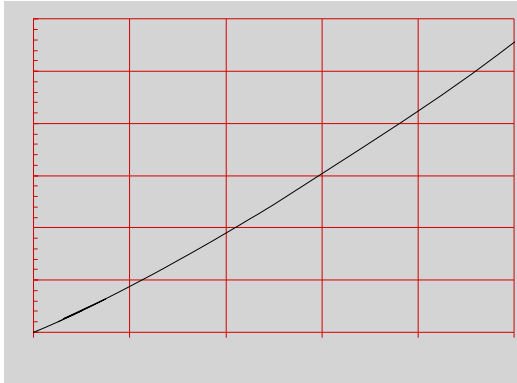
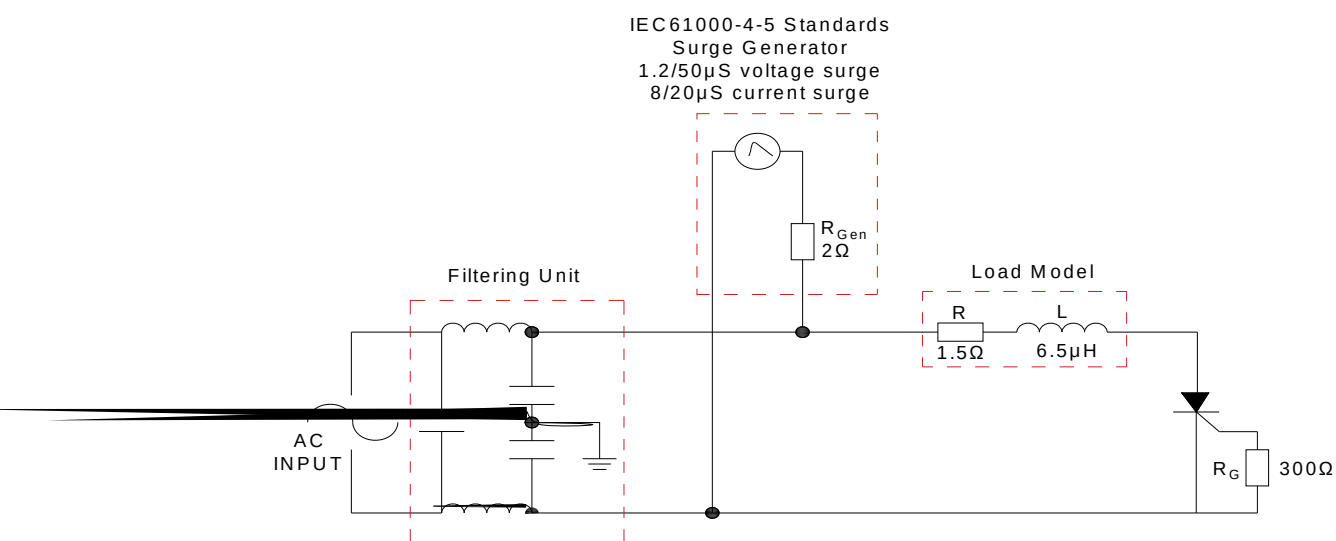


FIG.2: RMS on-state current versus case temperature

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



**ORDERING INFORMATION**

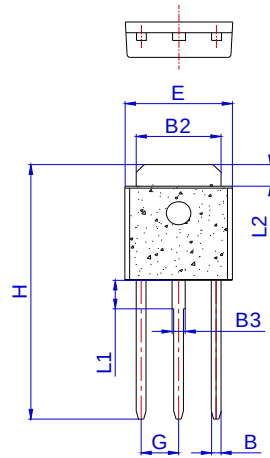
Order code	Voltage $V_{\text{DRM}}/V_{\text{RRM}}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
JCT816HH	800	15	TO-251	80	Tube

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