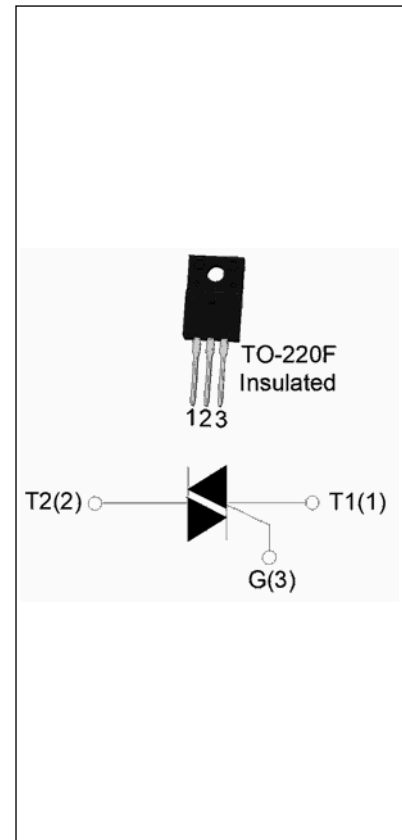




## T0450H-8F 4A TRIAC

Rev.A.1.1

The T0450H-8F triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. Compared to traditional triacs, T0450H-8F provides a very high switching capability up to junction temperatures of 150°C. By using an external plastic package, T0450H-8F provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.



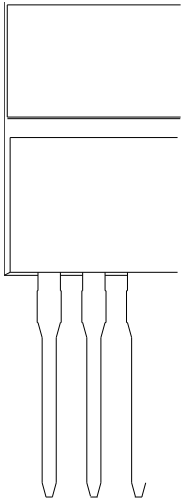
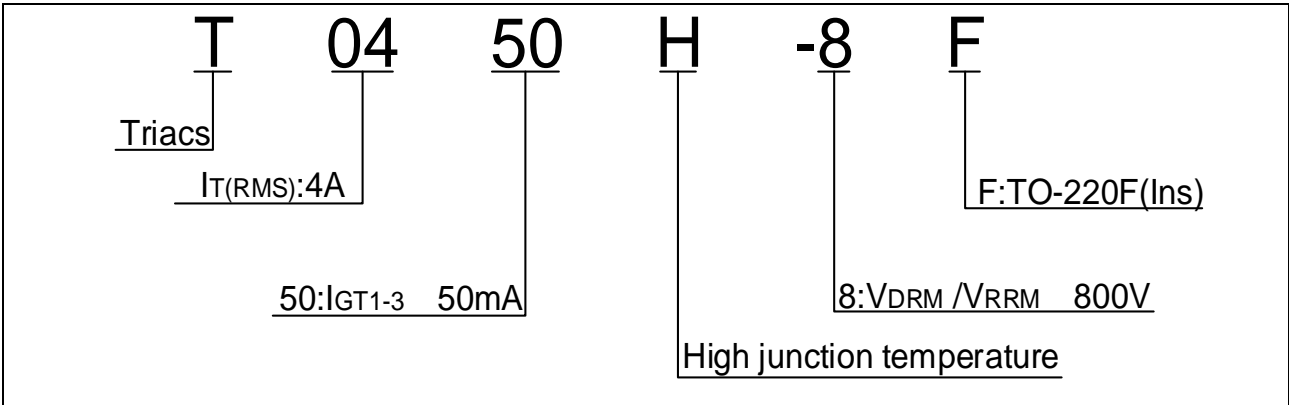
Symbol	Value	Unit
$I_{T(RMS)}$	4	A
$V_{DRM}/V_{RRM}$	800	V
$I_{GT} / /$	50/50/50	mA

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
RMS on-state current ( $T_c = 129^\circ\text{C}$ )	$I_{T(RMS)}$	4	A
Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$ , $T_j=25^\circ\text{C}$ )	$I_{TSM}$	40	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6\text{ms}$ , $T_j=25^\circ\text{C}$ )		44	
$I^2t$ value for fusing ( $t_p=10\text{ms}$ , $T_j=25^\circ\text{C}$ )	$I^2t$	8	$\text{A}^2\text{s}$
Critical rate of rise of on-state current ( $I_G=2 \times I_{GT}$ , $f=100\text{Hz}$ , $T_j=150^\circ\text{C}$ )	$di/dt$	100	$\text{A}/\mu\text{s}$
Peak gate current ( $t_p=20\mu\text{s}$ , $T_j=150^\circ\text{C}$ )	$I_{GM}$	4	A

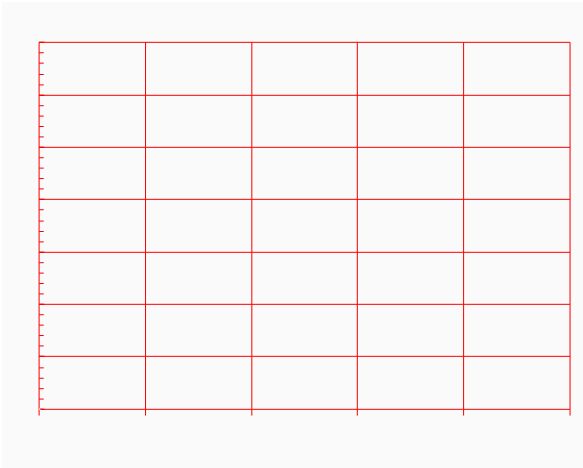
Average gate power dissipation ( $T_j=150$ )	$P_{G(AV)}$	1	W
Peak gate power	$P_{GM}$	10	W
Peak pulse voltage ( $T_j=25$ ; non-repetitive, off-state; FIG.7)	$V_{pp}$	4	kV

( $T_j=25$  unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D=12V R_L=33$	- -	MAX.	50	mA
$V_{GT}$		- -	MAX.	1	V
$V_{GD}$	$V_D=V_{DRM} T_j=150$ $R_L=3.3k$	- - $R$	MIN.	0.2	V

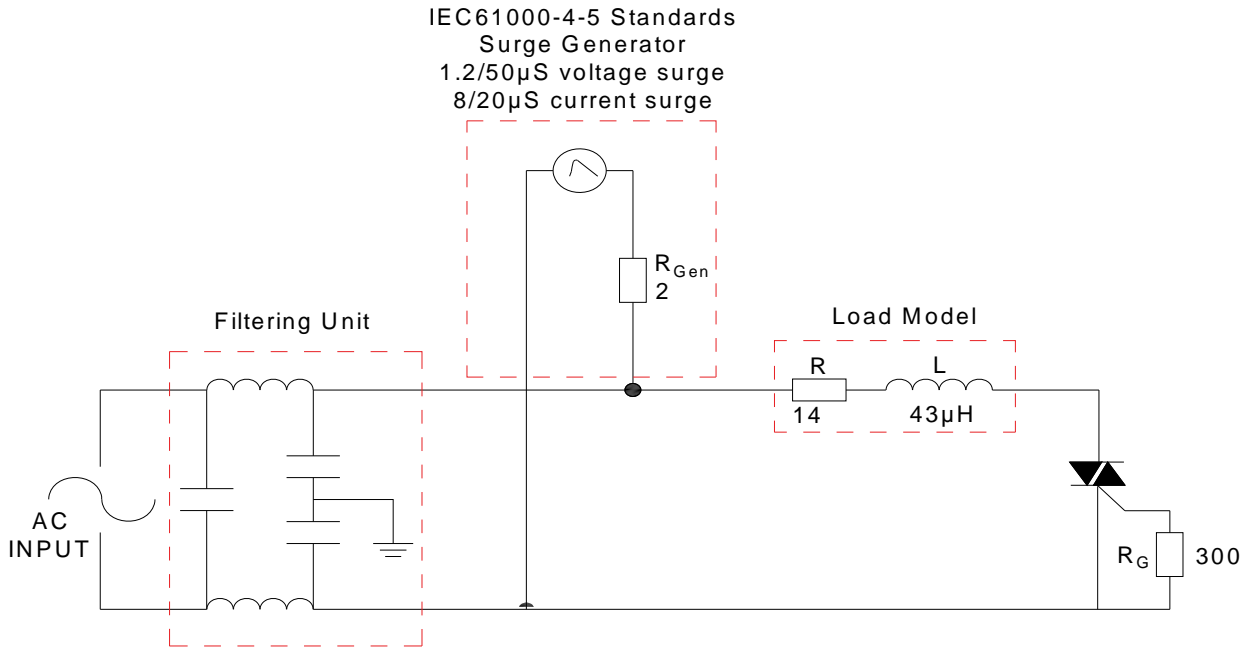


**FIG.1:** Maximum power dissipation versus RMS on-state current



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

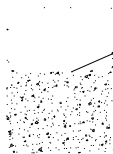
FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(Ma)	Package	Base qty. (pcs)	Delivery mode
		- -			
T0450H-8F	800	50	TO-220F(Ins)	50	Tube

### Document Revision History

Date	Revision	Changes
Apr.10, 2023	A.1.0	Last updated
Oct.10, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA



Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of t d Â