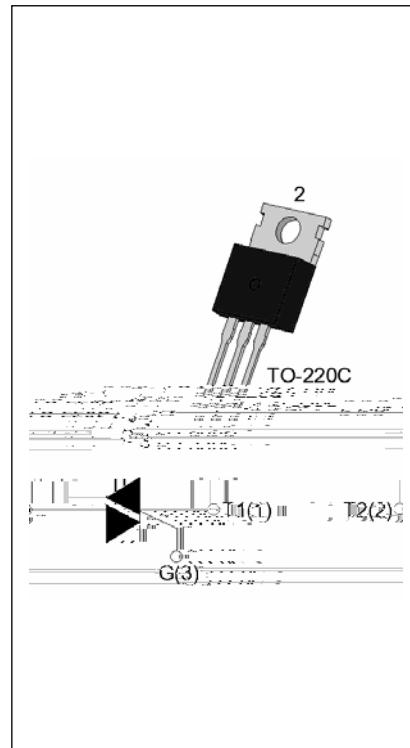


**DESCRIPTION:**

The T0450H-6C 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-6C provides a very high switching capability up to junction temperatures of 150°C. From T2 terminals to external heatsink. Package TO-220C is RoHS compliant.

**MAIN FEATURES**

Symbol	Value	Unit
$I_{T(RMS)}$	4	A
$V_{DRM}/V_{RRM}$	600	V
$I_{GT} / /$	50/50/50	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 ( $T_j=25^\circ C$ )	$V_{DRM}$	600	V
Repetitive peak reverse voltage ( $T_j=25^\circ C$ )	$V_{RRM}$	600	V
RMS on-state current ( $T_c = 0.140^\circ C$ )	$I_{T(RMS)}$	4	A
Non repetitive surge peak on-state current (full cycle , $t_p=20ms$ , $T_j=25^\circ C$ )	$I_{TSM}$	40	A
Non repetitive surge peak on-state current (full cycle , $t_p=16.6ms$ , $T_j=25^\circ C$ )		44	
$I^2t$ value for fusing ( $t_p=10ms$ , $T_j=25^\circ C$ )	$I^2t$	8	$A^2s$
Critical rate of rise of on-state current ( $I_G=2mA$ , $f=100Hz$ , $T_j=150^\circ C$ )	$dI/dt$	100	$A/\mu s$
Peak gate current ( $t_p=20\mu s$ , $T_j=150^\circ C$ )	$I_{GM}$	4	A
Average gate power dissipation ( $T_j=150^\circ C$ )	$P_{G(AV)}$	1	W
Peak gate power	$P_{GM}$	10	W

**T0450H-6C**

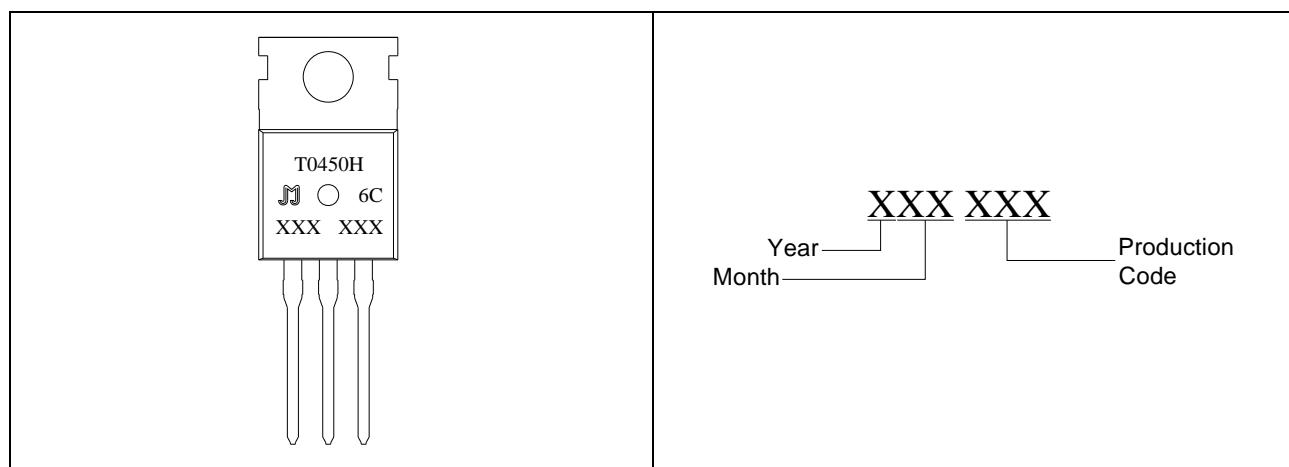
Peak pulse voltage (T <sub>j</sub> =25 ; non-repetitive,off-state;FIG.7)	V <sub>pp</sub>	4	kV
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**ELECTRICAL CHARACTERISTICS (T<sub>j</sub>=25 unless otherwise specified)**

Symbol	Test Condition	Quadrant	Value		Unit
I <sub>GT</sub>					
V <sub>GT</sub>	V <sub>D</sub> =12V R <sub>L</sub> =3.3K	- -	MAX.	1	V
V <sub>GD</sub>	V <sub>D</sub> =V <sub>DRM</sub> T <sub>j</sub> =150 R <sub>L</sub> =3.3K	- -	MIN.	0.2	V
I <sub>G</sub>	I <sub>G</sub> =1/2I <sub>GT</sub>	-	MAX.	50	mA
				0 0 \$d ,	

**ORDERING INFORMATION**

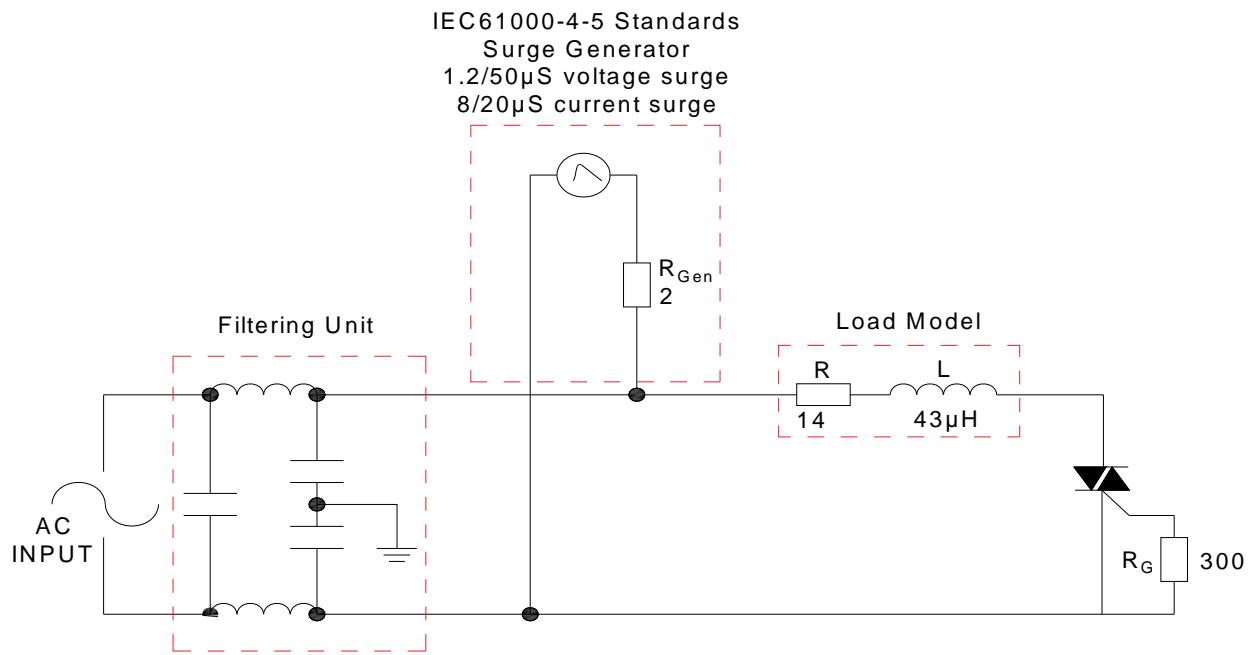
<b>T</b>	<b>04</b>	<b>50</b>	<b>H</b>	<b>-6</b>	<b>C</b>
Triacs					C:TO-220C
					6:V <sub>DRM</sub> /V <sub>RRM</sub> 1 600V
		50:IGT1-3 0 50mA			High junction temperature

**MARKING**

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

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

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



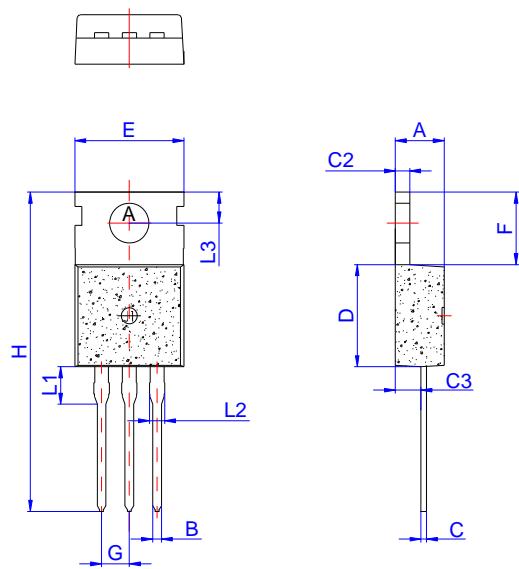
**ORDERING INFORMATION**

Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
<b>T0450H-6C</b>	<b>600</b>	<b>50</b>	<b>TO-220C</b>	<b>50</b>	<b>Tube</b>

**Document Revision History**

Date	Revision	Changes
Apr.10, 2023	A.1.0	Last updated

## PACKAGE MECHANICAL DATA



Ref.	Dimensions			Inches		
	Millimeters					
	Min.	Typ.	Max.	Min.	Typ.	Max.
A						
B						

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