T0410H-6F 4A TRIAC

Rev.A.1.1

DESCRIPTION:

The T0410H-6F 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, T0410H-6F provides a very high switching capability up to junction temperatures of 150°C. It can be driven directly through the MCU I/O port. By using an external plastic package, T0410H-6F provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.

MAIN FEATURES

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)	V_{DRM}	600	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	600	V
RMS on-state current ($T_C \leq$ 129)	$I_{T(RMS)}$	4	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	40	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)			
I^2t value for fusing (t_p=10ms , T_j=25)	I^2p	8	A^2s
Critical rate of rise of on-state current (I_G=2 × I_{GT} , f=100Hz , T_j=150) dI/dt	50	A/μs	

4	A
1	W
10	W
3	kV

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lue	Unit
10	mA
1	V
0.2	V
20	mA
35	
20	mA
200	V/μs
1	A/ms
25	μs

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

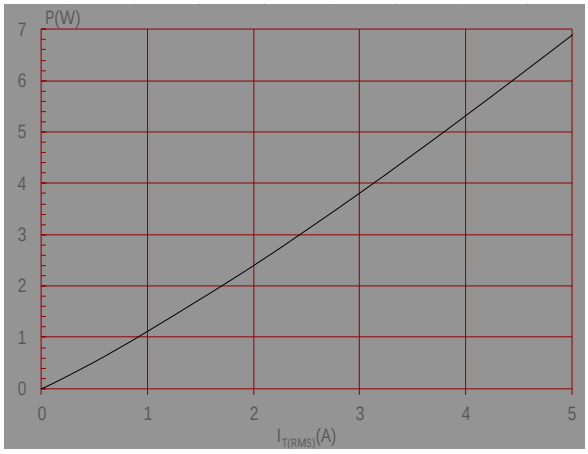


FIG.2: RMS on-state current versus case temperature

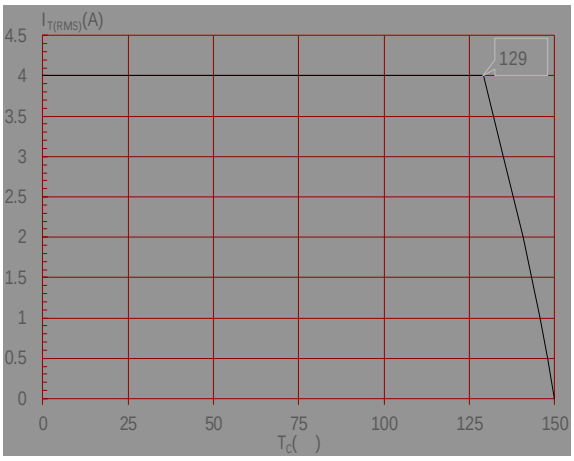


FIG.3: Surge peak on-state current versus number of cycles

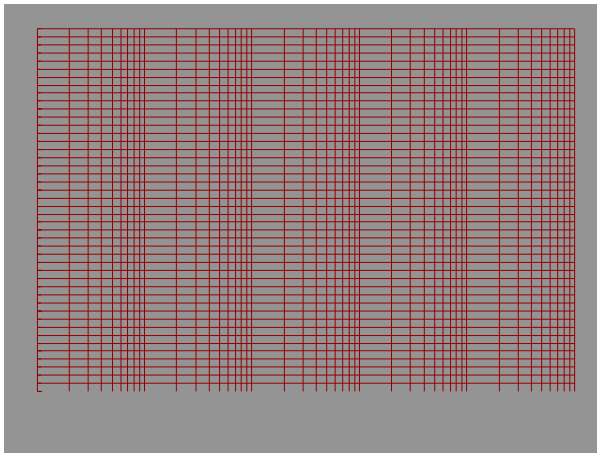
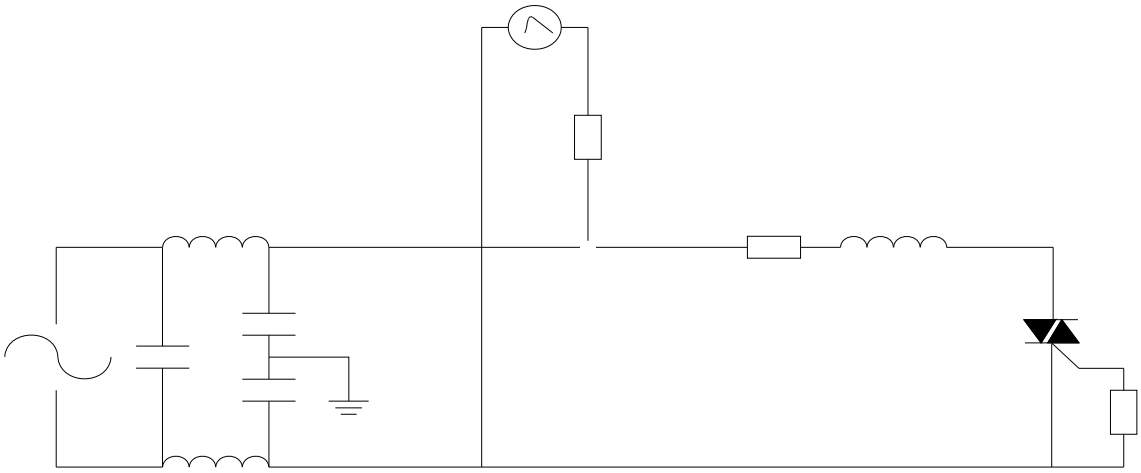


FIG.4: On-state characteristics

FIG.7 Test 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
		- -			
T0410H-6F	600	10	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

PACKAGE MECHANICAL DATA

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