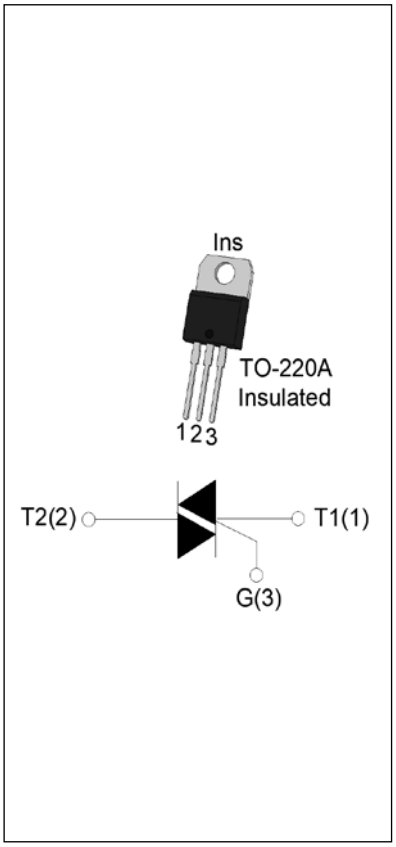
T1620H-6A 16A TRIAC

Rev.A.1.0

The T1620H-6A 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, T1620H-6A provides a very high switching capability up to junction temperatures of 150°C. By using an internal ceramic pad, T1620H-6A provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TO-220A is RoHS compliant.



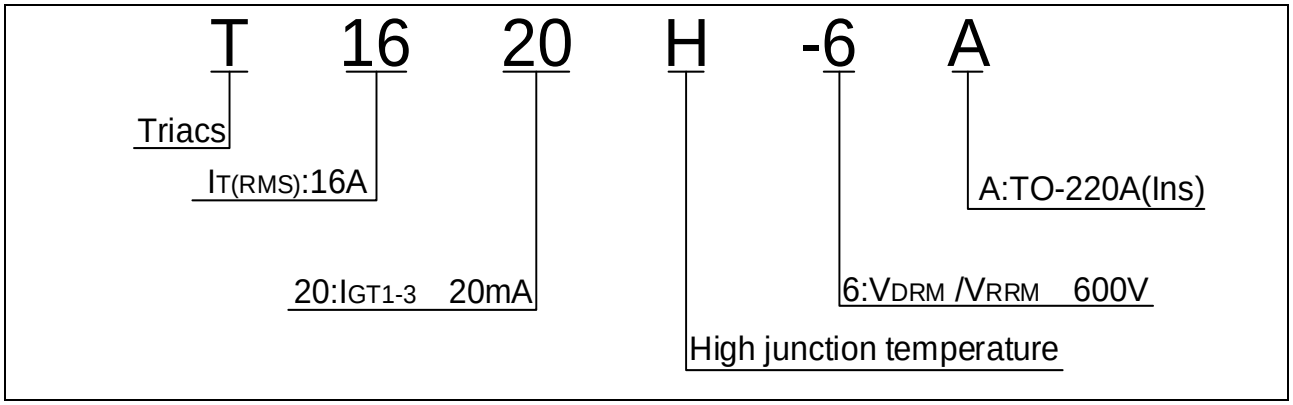
Symbol	Value	Unit
$I_{T(RMS)}$	16	A
V_{DRM} /V_{RRM}	600	V
I_{GT} / /	20/20/20	mA

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)	V_{DRM}	600	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	600	V
RMS on-state current (T_C 108)	$I_{T(RMS)}$	16	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	160	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		176	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	128	A^2s
Critical rate of rise of on-state current (I_G=2 I_{GT} , f=100Hz , T_j=150)	dI/dt	100	A s
Peak gate current (t_p=20 s , T_j=150)	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.	20	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	V				


T
16
20
H
-6
A
Triacs
IT(RMS):16A
20:IGT1-3 20mA
High junction temperature
6:VDRM /VRRM 600V
A:TO-220A(Ins)

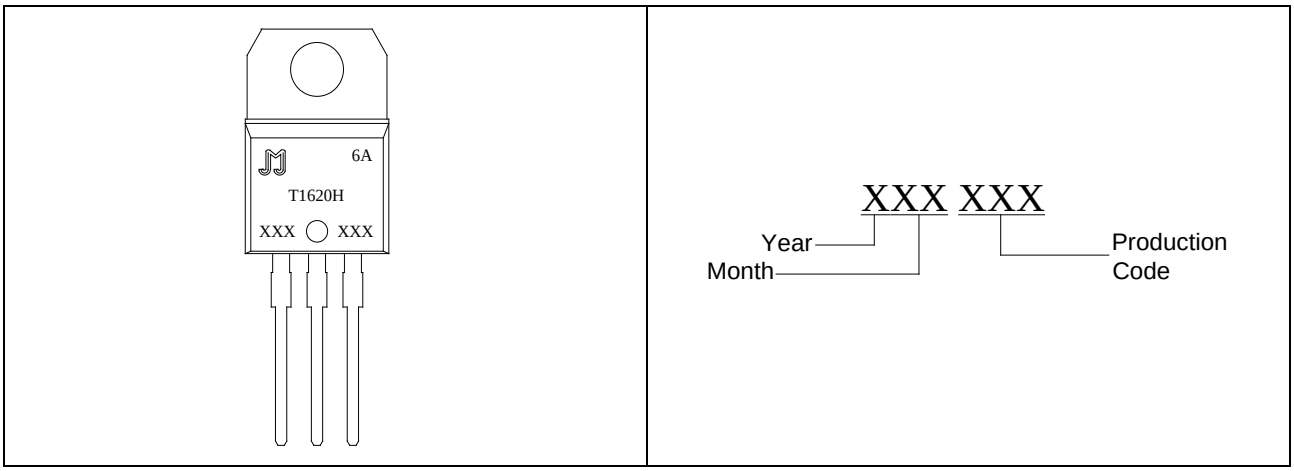

6A
T1620H
XXX XXX
XXX XXX
Year
Month
Production
Code

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

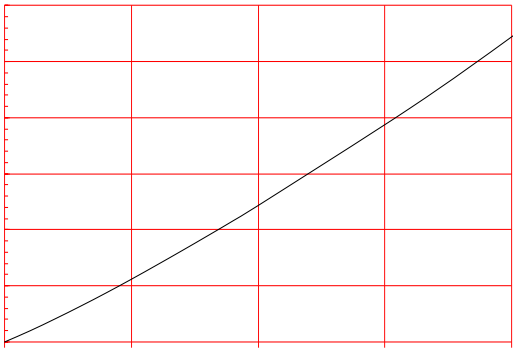


FIG.2: RMS on-state current versus case temperature

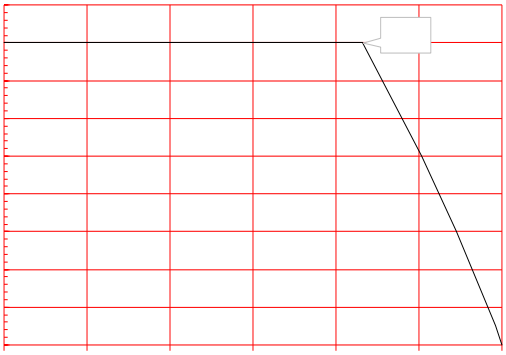


FIG.3: Surge peak on-state current versus number of cycles

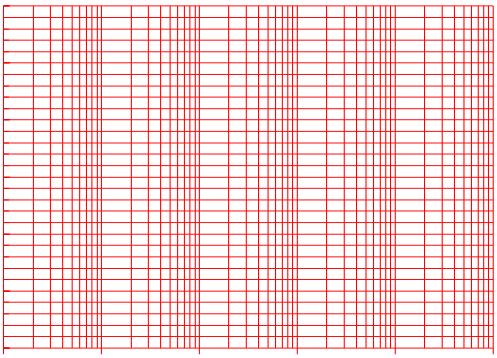
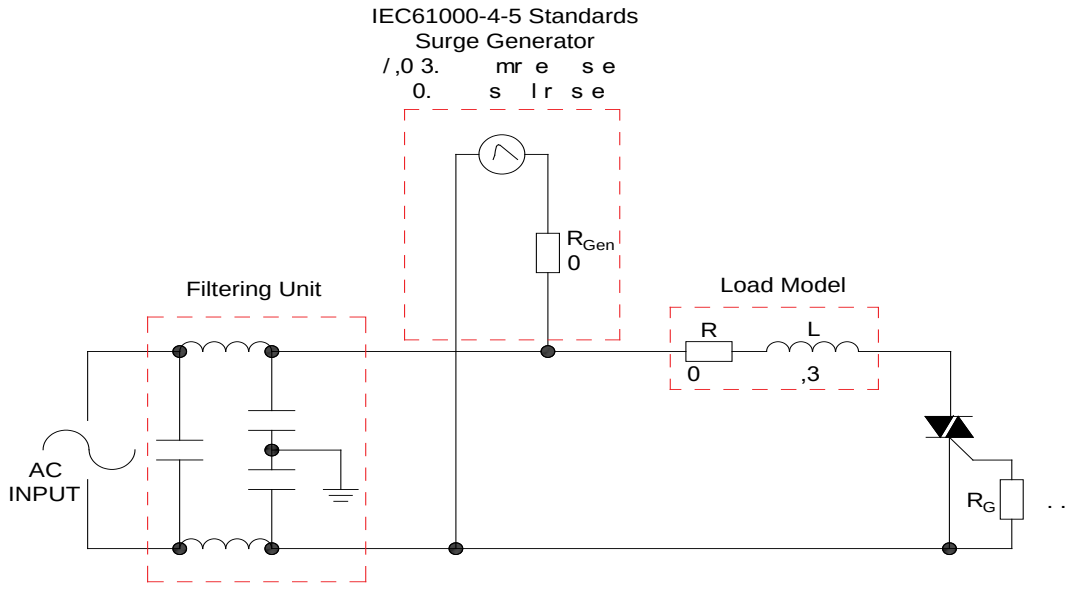


FIG.4: On-state characteristics

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

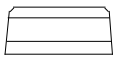


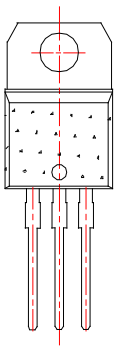
Refer to Instructions for installation of plastic-sealed in-line power devices released by JieJie

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
T1620H-6A	600	20	TO-220A(Ins)	50	Tube

Document Revision History

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





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