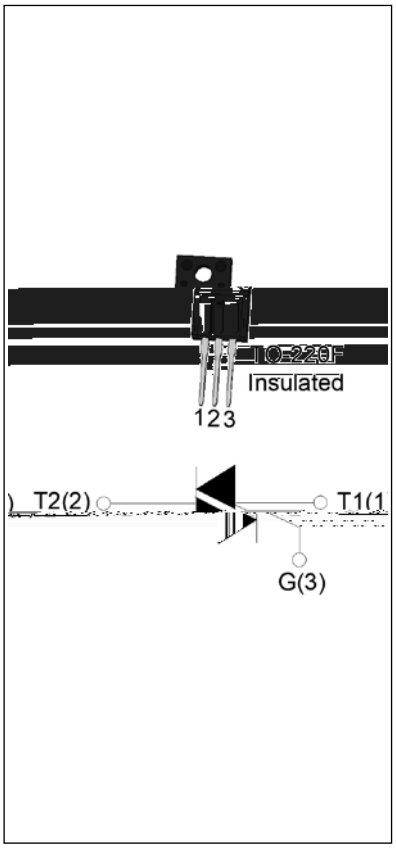
T1635H-6F 16A TRIAC

Rev.A.1.0

DESCRIPTION:

The T1635H-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, T1635H-6F provides a very high switching capability up to junction temperatures of 150°C. By using an external plastic package, T1635H-6F provides a rated insulation voltage of 2000 VRMS, complying with UL standards (File ref: E252906). Package TO-220F is RoHS compliant.



MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	16	A
V_{DRM} /V_{RRM}	600	V
I_{GT} / /	35/35/35	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)	V_{DRM}	600	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	600	V
RMS on-state current (T_C 0100)	$I_{T(RMS)}$	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

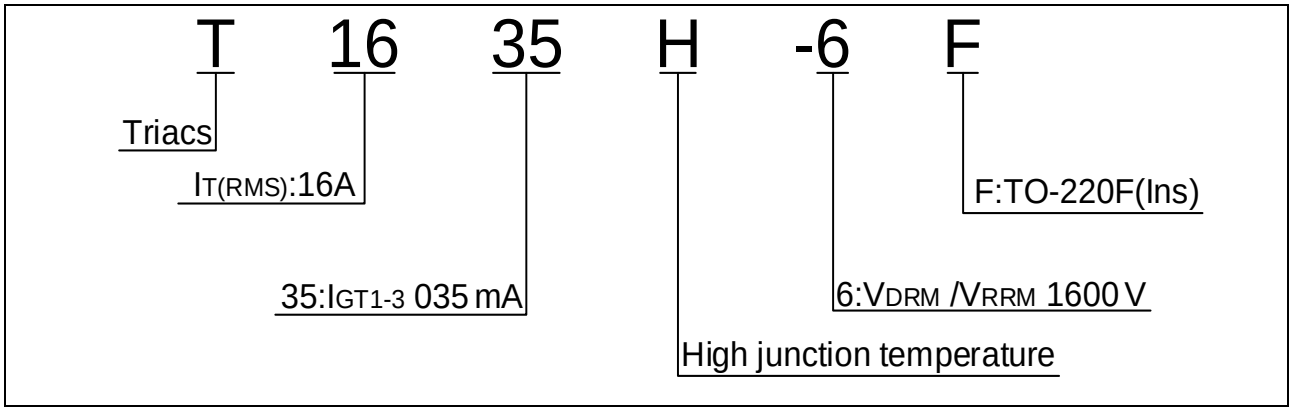
Average gate power dissipation (T_j=150)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	10	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	4	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

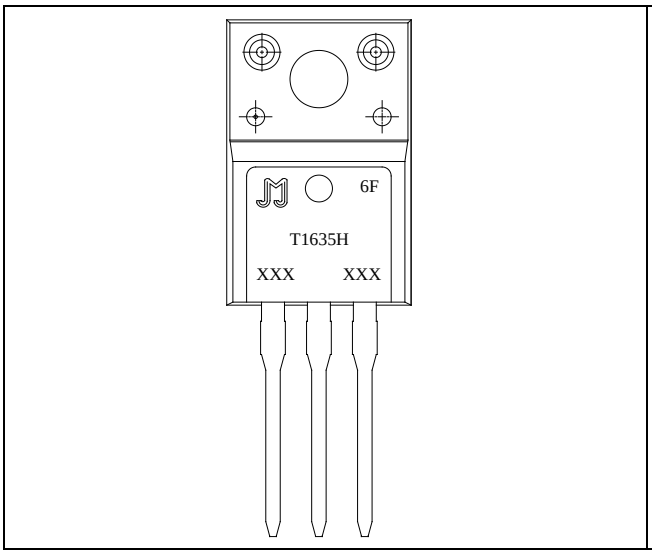
Symbol	Test Condition	Quadrant	Value	Unit

lj lm A(j)Tj -0.004 T1.7 Tc 0.057 Tw 7.4 0.48 re C 2_1 3.16 659.4 0.481 0.48C 2_1

ORDERING INFORMATION



MARKING



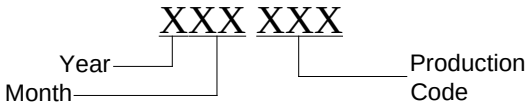


FIG.1 Maximum power dissipation versus RMS on-state current

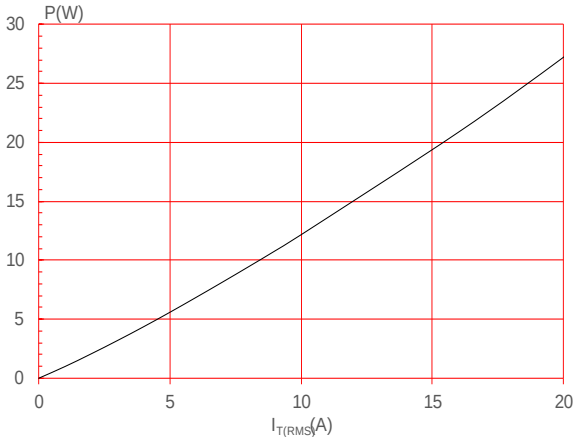


FIG.2: RMS on-state current versus case temperature

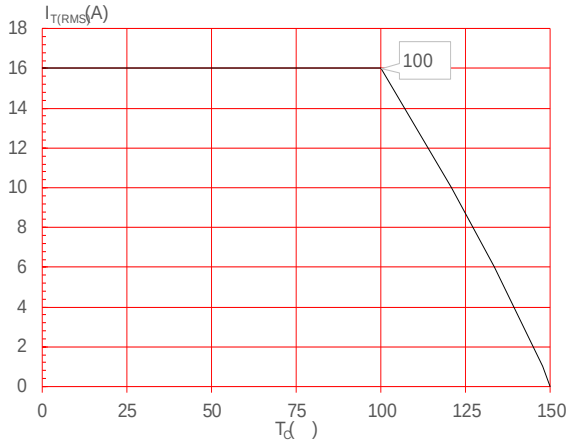


FIG.3: Surge peak on-state current versus number of cycles

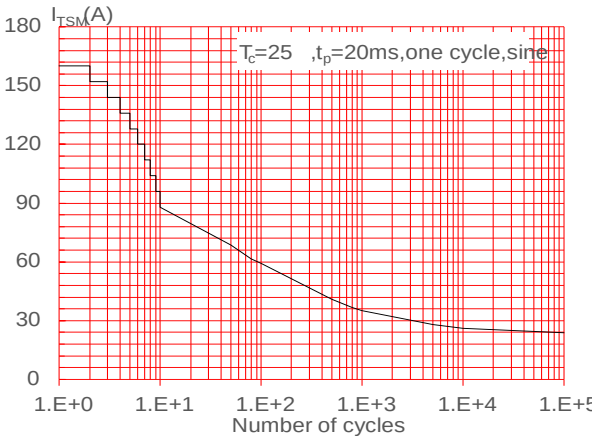


FIG.4: On-state characteristics

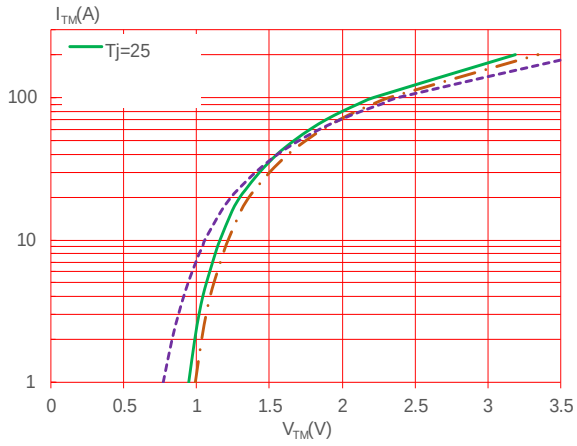
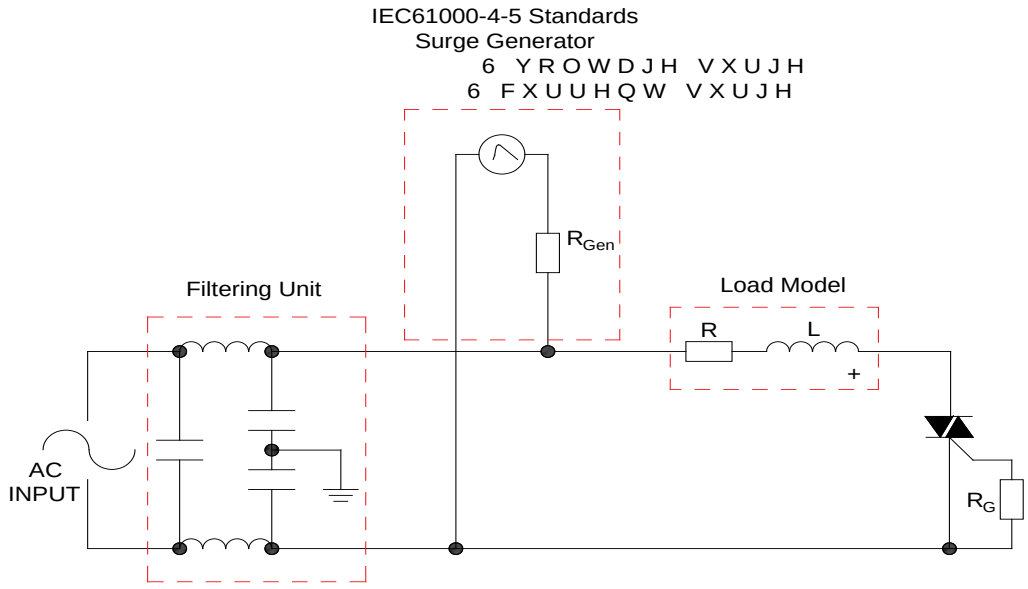


FIG.7 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards



SHAPING AND SOLDERING PARAMETERS

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

ORDERING INFORMATION

Order code	Voltage

PACKAGE MECHANICAL DATA