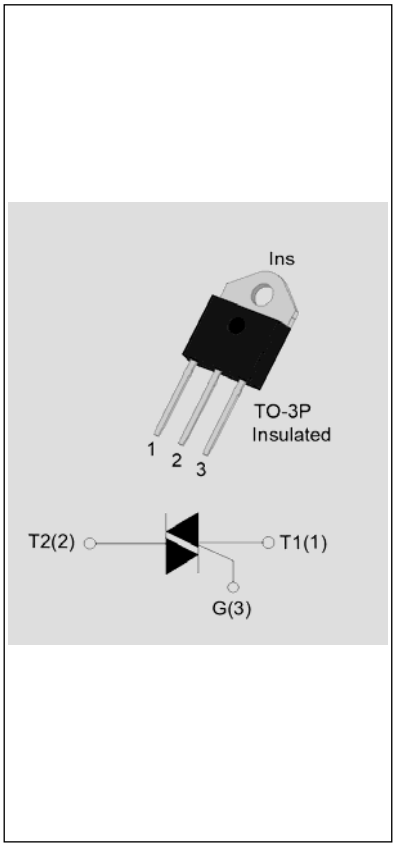
The T3050H-8Z triac is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as heating regulation, induction motor starting circuits, for phase control operation in light dimmers, motor speed controllers. Compared to traditional triacs, T3050H-8Z provides a very high switching capability up to junction temperatures of 150°C. By using an internal ceramic pad, T3050H-8Z provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TO-3P is RoHS compliant.



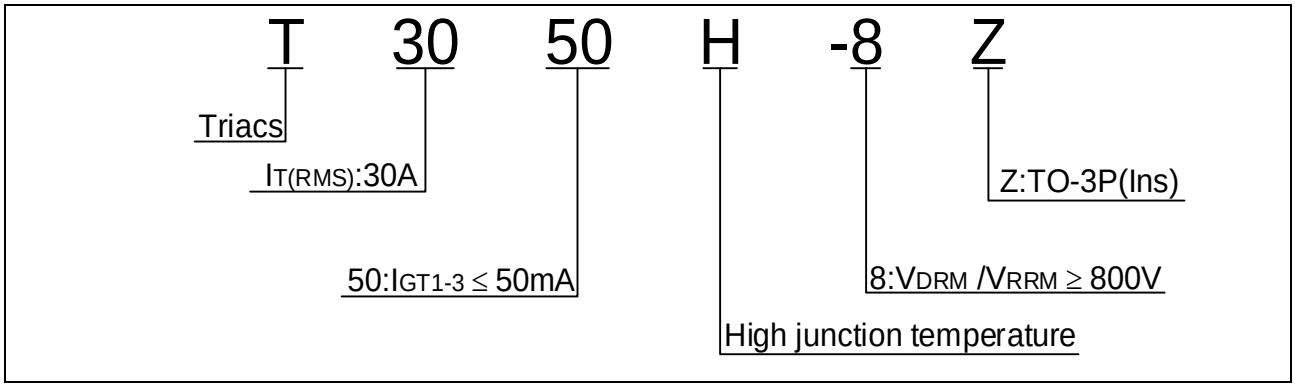
Symbol	Value	Unit
$I_{T(RMS)}$	30	A
V_{DRM} /V_{RRM}	800	V
I_{GT} / /	50/50/50	mA

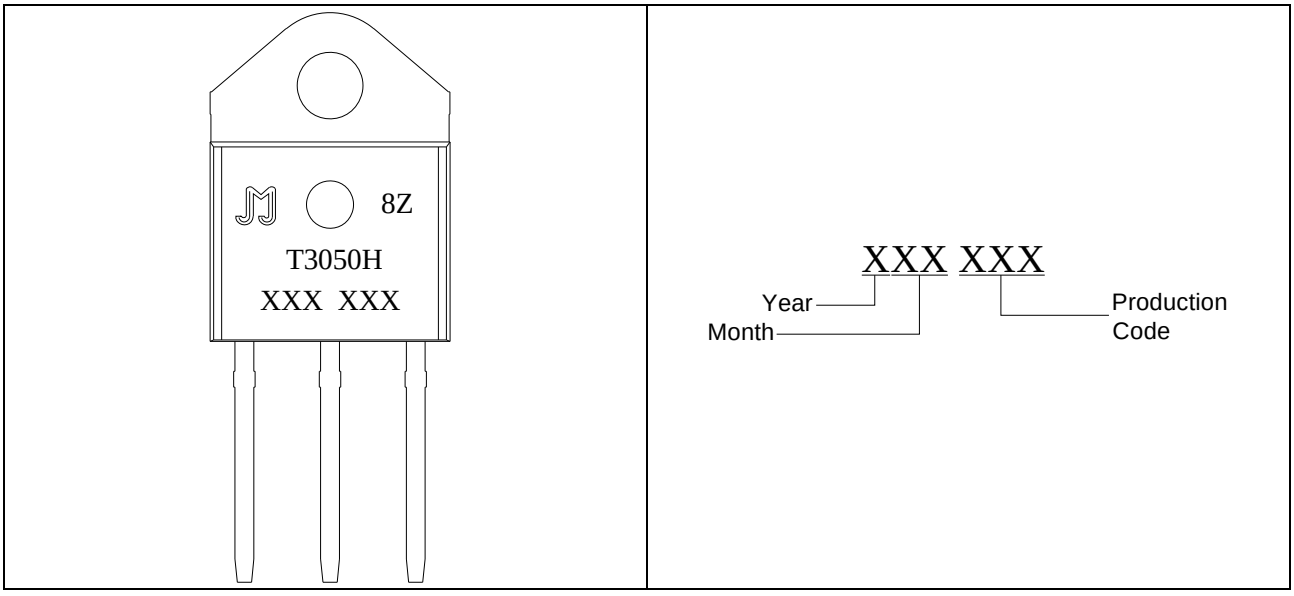
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-150	
Repetitive peak off-state voltage (T_j=25)	V_{DRM}	800	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	800	V
RMS on-state current ($T_C \leq$ 114)	$I_{T(RMS)}$	30	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	270	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		297	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	365	A^2s
Critical rate of rise of on-state current (I_G=2 × I_{GT} , f=100Hz , T_j=150)	dI/dt	100	A/μs
Peak gate current (t_p=20μs , 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}	1.2	kV

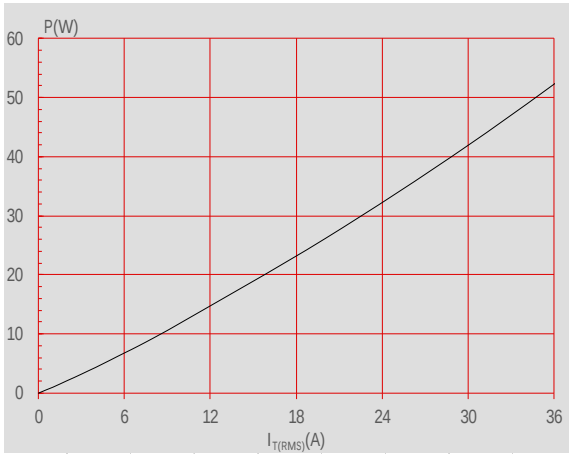
(T_j=25 unless otherwise specified)

I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1.3	V
V_{GD}	V_D = V_{DRM} T_j =150 R_L =3.3KΩ	- -	MIN.	0.15	V
I_L	I_G =1.2I_{GT}	-	MAX.	80	mA
				90	
I_H	I_T =500mA		MAX.	60	mA

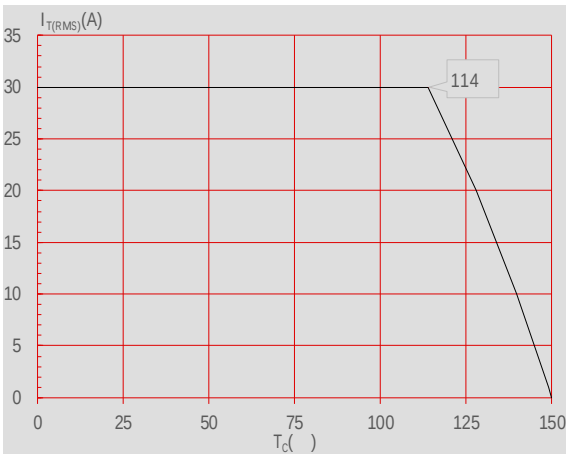

T
30
50
H
-8
Z
Triacs
IT(RMS):30A
50:IGT1-3 ≤ 50mA
High junction temperature
8:VDRM /VRRM ≥ 800V
Z:TO-3P(Ins)


8Z
T3050H
XXX XXX
XXX XXX
Year
Month
Production
Code

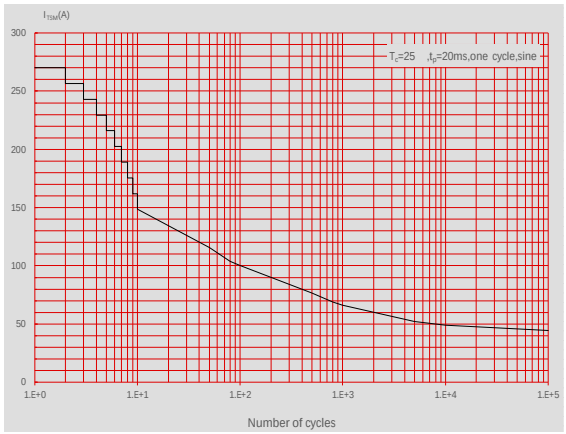
Maximum power dissipation versus RMS on-state current



RMS on-state current versus case temperature



Surge peak on-state current versus number of cycles



On-state characteristics

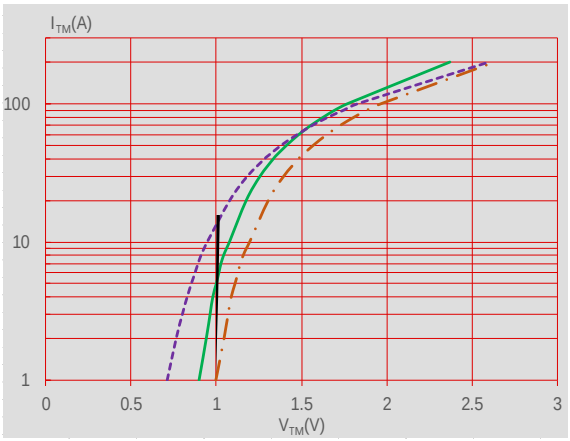
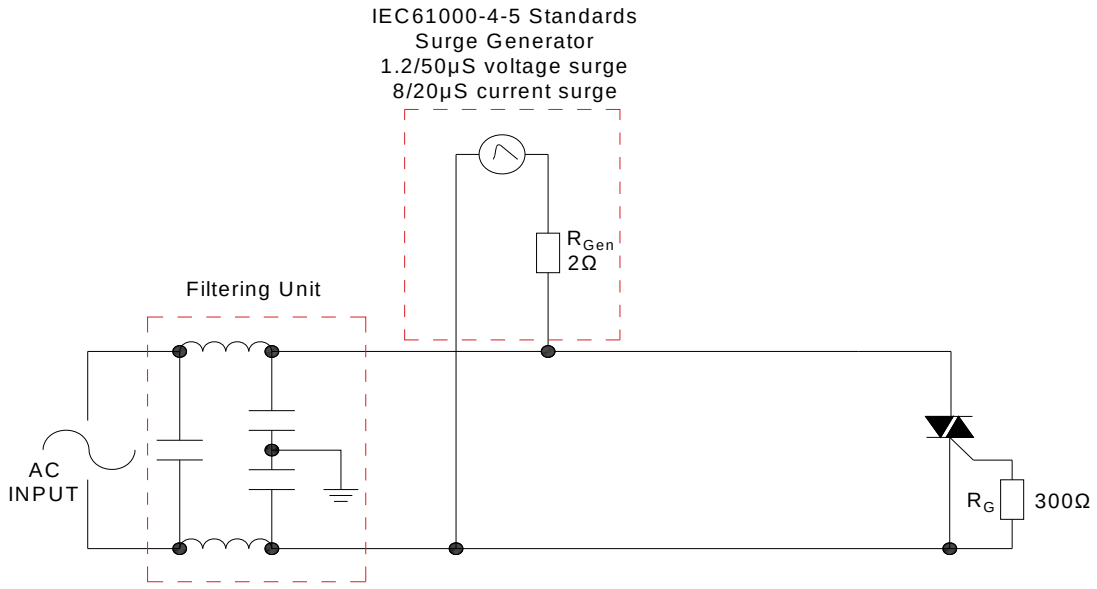


FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



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

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