



T3050H-8E 30A TRIAC

Rev.A.1.1

The T3050H-8E 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-8E provides a very high switching capability up to junction temperatures of 150°C. Package TO-263 is RoHS compliant.

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 ($T_j=25^\circ\text{C}$)	V_{DRM}	800	V
Repetitive peak reverse voltage ($T_j=25^\circ\text{C}$)	V_{RRM}	800	V
Effective current ($T_c = 117^\circ\text{C}$)	$I_{T(RMS)}$	30	A
Surge peak on-state current ($t_p=20\text{ms}, T_j=25^\circ\text{C}$)	I_{TSM}	270	A
Surge peak on-state current ($t_p=16.6\text{ms}, T_j=25^\circ\text{C}$)		297	
Surge current ($t_p=10\text{ms}, T_j=25^\circ\text{C}$)	I^2t	365	A^2s
Rate of rise of on-state current ($f=100\text{Hz}, T_j=150^\circ\text{C}$)	di/dt	100	$\text{A}/\mu\text{s}$
Gate current ($t_p=20\mu\text{s}, T_j=150^\circ\text{C}$)	I_{GM}	4	A

Peak pulse voltage ($T_j=25$; non-repetitive, off-state; FIG.8)	V_{pp}	1.2	kV
--	----------	-----	----

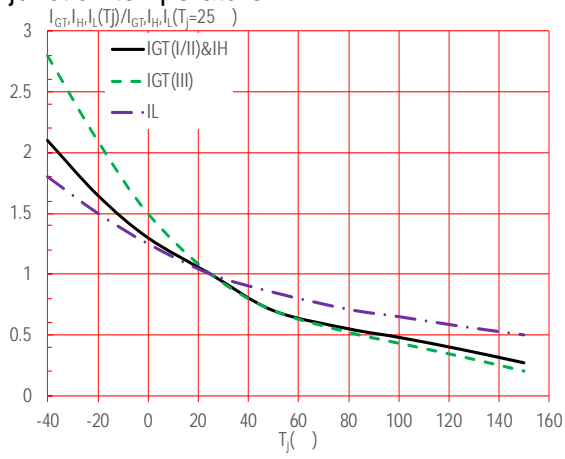
(T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=33$	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1.3	V
V_{GD}	$V_D=V_{DRM}$ $T_j=150$ $R_L=3.3k$	- -	MIN.	0.15	V
I_L	$I_G=1.2I_{GT}$	-	MAX.	80	mA
				90	
I_H	$I_T=500mA$		MAX.	60	mA
dV/dt	$V_D=540V$ Gate Open $T_j=150$		MIN.	2000	V/ μs
(dI/dt) _c	(dV/dt) _c =20V/ μs , $T_j=150$		MIN.	30	A/ms
t_{on}	$I_G=80mA$ $I_A=400mA$ $I_R=40mA$ $T_j=25$		TYP.	15	μs
t_{off}				100	

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	$I_{TM}=42A$ $t_p=380\mu s$	$T_j=25$	1.5	V
V_{TO}	Threshold voltage	$T_j=150$	0.7	V
R_D	Dynamic resistance	$T_j=150$	16	m
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$	8	μA
I_{RRM}		$T_j=150$	8	mA

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	0.8	W
$R_{th(j-a)}$	junction to ambient (AC, in free air, $S=2cm^2$)	45	W

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature



T3050H-8E

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
T3050H-8E	800	50	TO-263	50	Tube
T3050H-8E-TR					
				T50	



Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information. This document supersedes and replaces all information previously supplied.



is a registered trademark of Jiangsu JieJie Microelectronics Co., Ltd.

Copyright © 2025 Jiangsu JieJie Microelectronics Co., Ltd. All rights reserved.