



T1250H-8E 12A TRIAC

Rev.A.1.1

## DESCRIPTION:

The T1250H-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, T1250H-8E provides a very high switching capability up to junction temperatures of 150°C. Package TO-263 is RoHS compliant.

## MAIN FEATURES

## ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
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Peak pulse voltage ( $T_j=25$ ; non-repetitive, off-state; FIG.8)	$V_{pp}$	4.5	kV
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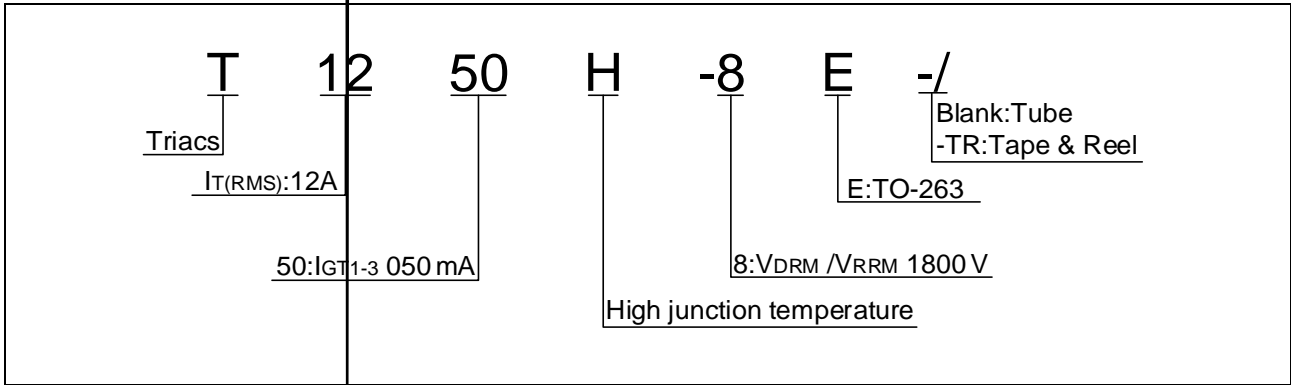
**ELECTRICAL CHARACTERISTICS** (unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D=12V R_L=33$	- -	MAX.	50	mA
$V_{GT}$		- -	MAX.	1	V
$V_{GD}$	$V_D=V_{DRM} T_j=150$ $R_L=3.3k$	- -	MIN.	0.2	V
$I_L$	$I_G=1.2I_{GT}$	-	MAX.	50	mA
				80	
$I_H$	$I_T=500mA$		MAX.	40	mA
$dV/dt$	$V_D=540V$ Gate Open $T_j=150$		MIN.	2000	V/s
$(dI/dt)_c$	$V_D=150V$		MIN.	10	A/ms
$t_{on}$	$I_G=80mA I_A=400mA I_R=40mA$ $T_j=25$		TYP.	3	s
$t_{off}$				70	

**STATIC CHARACTERISTICS**

Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=17A t_p=380 s$	$T_j=25$	1.4	V
$V_{TO}$	Threshold voltage	$T_j=150$		

ORDERING INFORMATION



MARKING

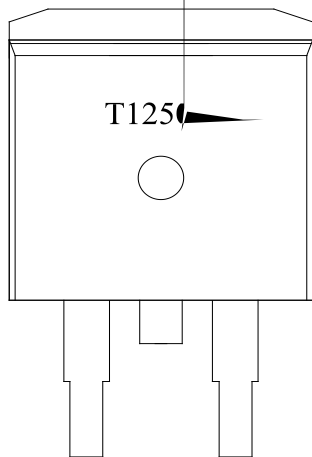




FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

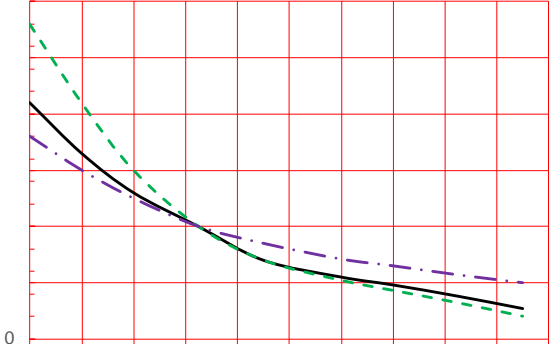
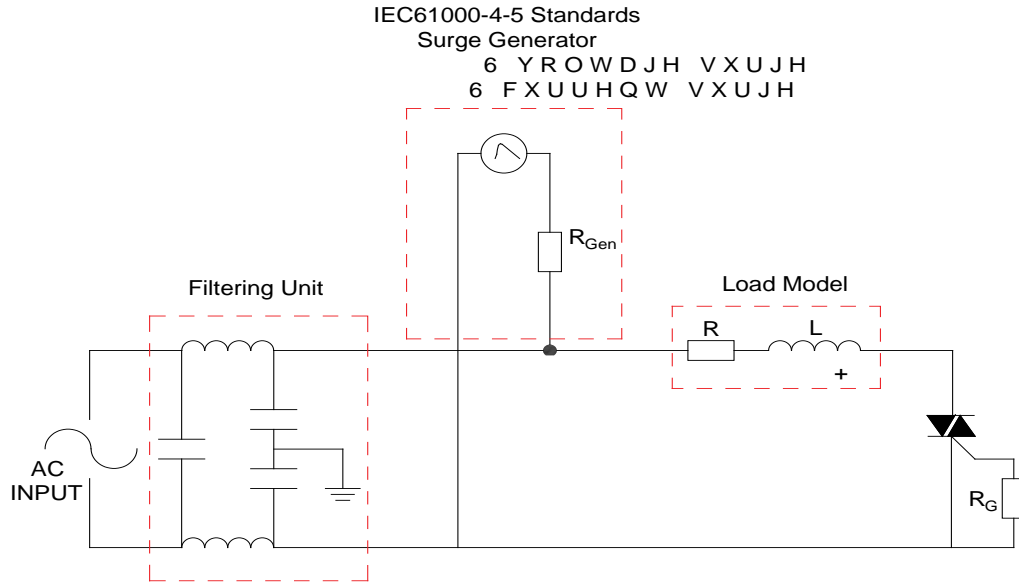


FIG.8 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards



## ORDERING INFORMATION

Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
T1250H-8E	800	50	TO-263	50	Tube
T1250H-8E-TR				800	Tape & Reel

## Document Revision History

Date	Revision	Changes
Apr.11, 2023	A.1.0	Last updated
Oct.17, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

## PACKAGE MECHANICAL DATA

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.90		10.20	0.390		0.402
B	14.70		15.80	0.579		0.622
C	9.40		9.60	0.370		0.378
D	2.40			0.094		
E	1.20		1.50	0.047(0)	0.059(0)	0.059(0)
F						

DELIVERY MODE



Information furnished in this document is believed to be accurate and reliable. However,