T0810H-8E 8A TRIAC

Rev.A.1.0

DESCRIPTION:

The T0810H-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, T0810H-8E provides a very high switching capability up to junction temperatures of 150°C. It can be driven directly through the MCU I/O port. Package TO-263 is RoHS compliant.

MAIN FEATURES

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}	800	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	800	V
RMS on-state current ($T_C \leq$ 133)	$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	80	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		88	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	32	A^2s
Critical rate of rise of on-state current (I_G=2× I_{GT} , f=100Hz , T_j=150)	dI/dt	50	A s
Peak gate current (t_p=20 s , T_j=150)	I_{GM}		

Peak gate power	P_{GM}	10	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.8)	V_{pp}	2.5	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified) **)**

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

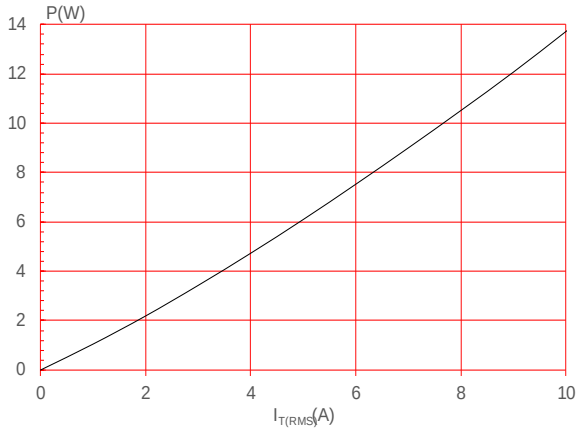


FIG.2: RMS on-state current versus case temperature

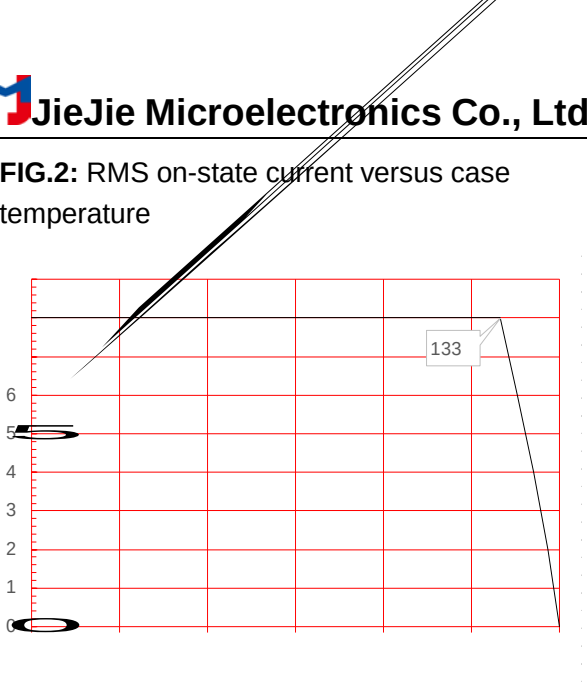


FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature

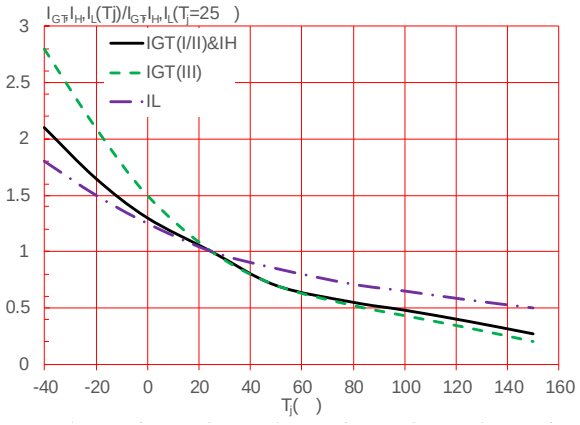
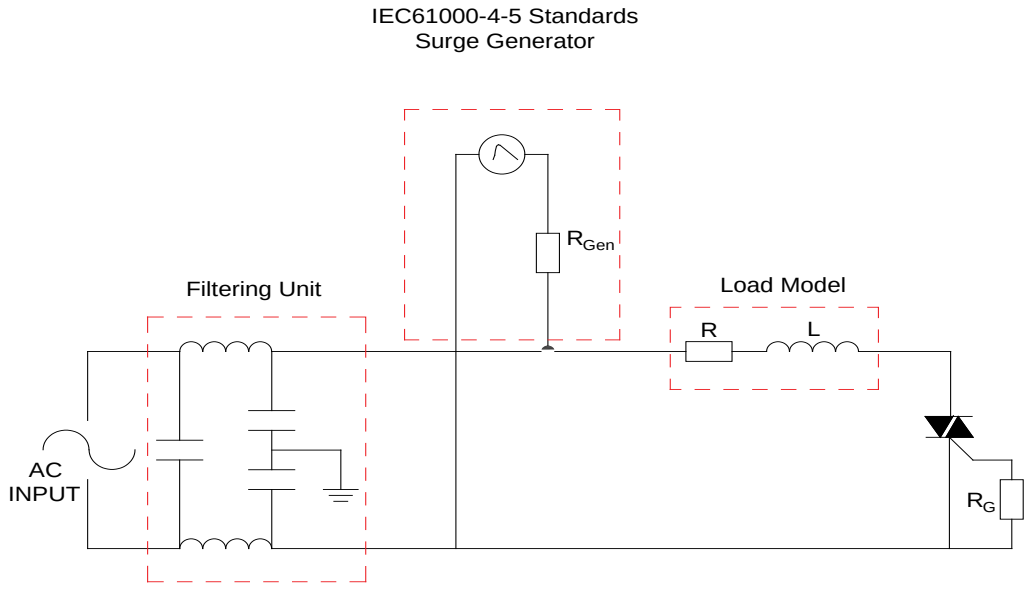


FIG.8 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards



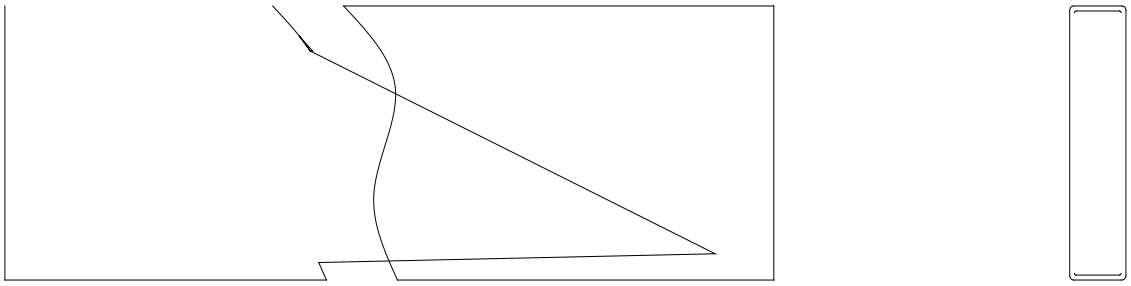
ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
T0810H-8E	800	10	TO-263	50	Tube
T0810H-8E-TR				800	Tape & Reel

Document Revision History

Date	Revision	Changes
Apr.11, 2023	A.1.0	Last updated

DELIVERY MODE



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