T0435H-6E 4A TRIAC

Rev.A.1.1

DESCRIPTION:

The T0435H-6E 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, T0435H-6E provides a very high switching capability up to junction temperatures of 150°C. Package TO-263 is RoHS compliant.

MAIN FEATURES

Symbo.88 134.159 0.481 re f 495.84 131.88 0.481 0.481 re 5.85.84 53599 0.43bo.88 134.159 0.

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 0137)	$I_{T(RMS)}$	4	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	40	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		44	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	8	A^2s
Critical rate of rise of on-state current (I_G=2× I_{GT} , f=100Hz , T_j=150)	dI/dt	80	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.8)	V_{pp}	4	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol					
I_{GT}	V_D =12V R_L =33	- -	MAX	35	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 =1.2I_{GT}	-	MAX	40	mA
I_H	I =100mA		MAX	30	mA
dV/dt	D	j =150	MIN.	1200	V s
(dI/dt)c	G 9 G W F	j=9150V 7	MIN.	8	A/ms
t_{on} / t_{off}	G=40mA I =200mA I_R=20mA T_j=25		TYP.	3 / 30	s

STATIC CHARACTERISTICS

Symbol	Parameter	Value(MAX .)	Unit
V_{TM}	I_{TM} =5.5A t_p=380 s T_j=25		

ORDERING INFORMATION

T 04 35 H -6 E -/

- T: Triacs
- 04: $I_{T(RMS)}$:4A
- 35: I_{GT1-3} 035 mA
- H: High junction temperature
- -6: V_{DRM} /V_{RRM} 1600 V
- E: TO-263
- -/: Blank:Tube; -TR:Tape & Reel

MARKING

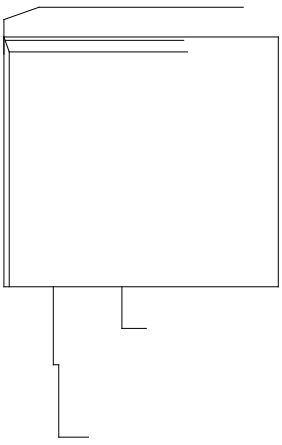


FIG.1: Maximum power dissipation versus RMS on-state current

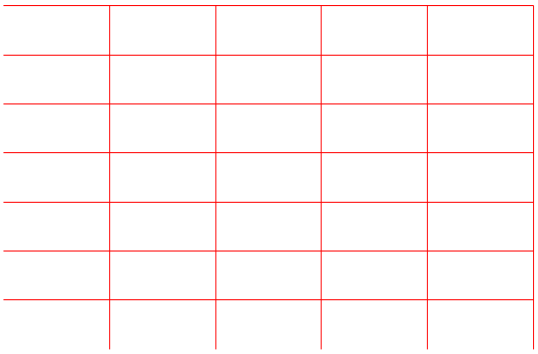


FIG.2: RMS on-state current versus case temperature 01234567012345P(W)(TR MS)(

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

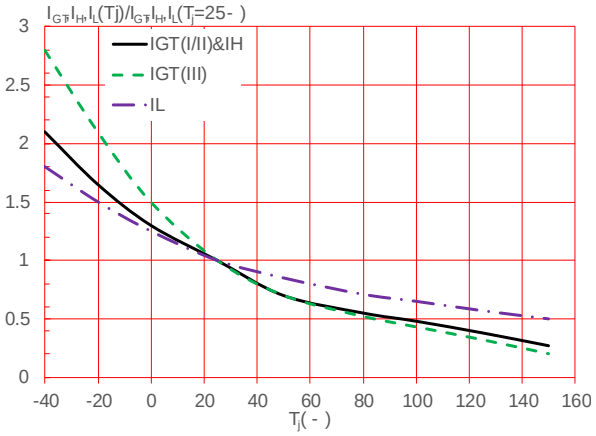
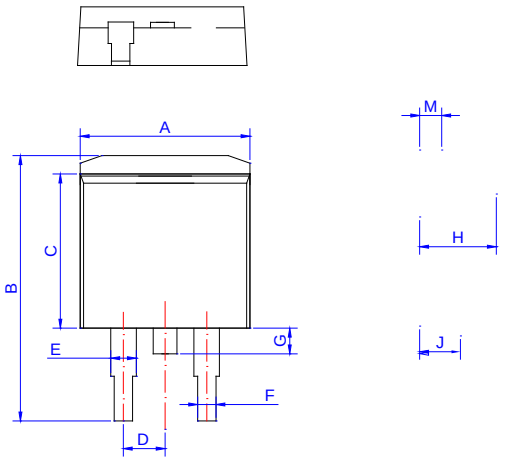


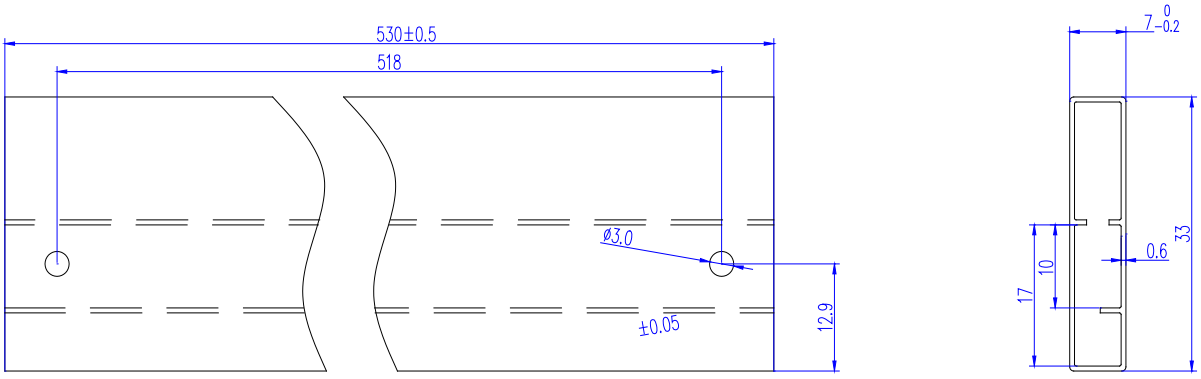
FIG.8 ÖTest circuit for inductive and resistive loads to IEC-61000-4-5 standards

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		0.059
F	0.75		0.85	0.029		0.033

DELIVERY MODE



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