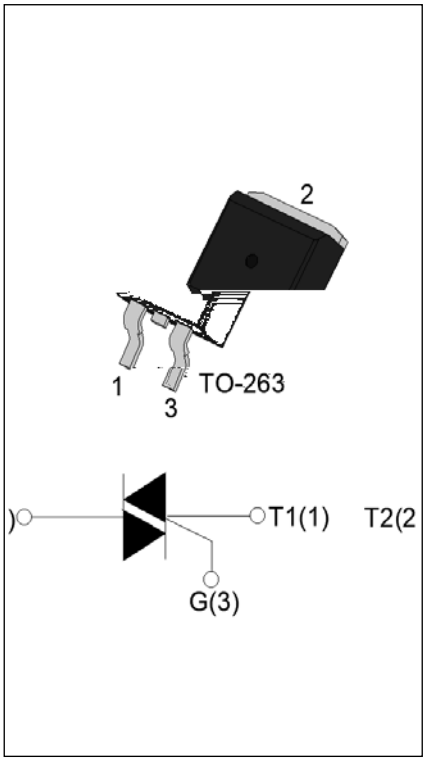
T0435H-8E 4A TRIAC

Rev.A.1.0

DESCRIPTION:

The T0435H-8E tic is suitable for general purpose AC switching. It can be used as an ON/OFF function in applications such as static relays, heating regulation, induction motor starting circuits, or for phase control operation in light dimmers, motor speed controllers, and similar power electronics applications. The T0435H-8E provides high switching capability with high noise immunity and a guaranteed commutation up to 150°C junction temperature. The TO-263 package is RoHS compliant.



MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	4	A
V_{DRM}/V_{RRM}	800	V
I_{GT} / /	35/35/35	mA

ABSOLUTE MAXIMUM RATINGS

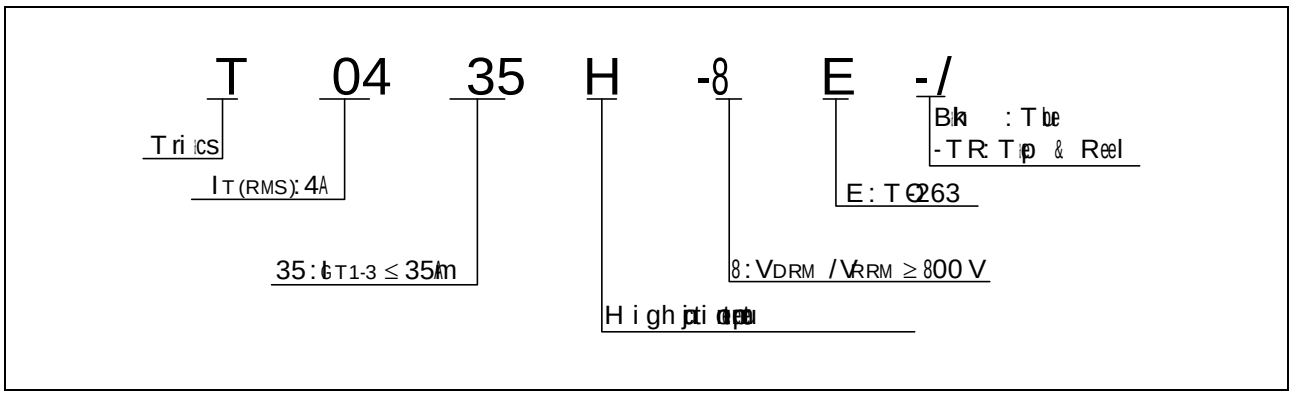
Parameter	Symbol	Value	Unit
Storage junction temperature	T_{stg}	-40-150	
Operating junction temperature	T_j	-40-150	
Repetitive peak off-state voltage (T_j=25)	V_{DRM}	800	V
Repetitive peak reverse voltage (T_j=25)	V_{RRM}	800	V
RMS on-state current ($T_C \le 137$)	$I_{T(RMS)}$	4	A
Non repetitive surge 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 gate voltage (Tj=25 ; non-repetitive, see FIG. 8)	V_{GP}	4	V

ELECTRICAL CHARACTERISTICS (Tj=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D=12V R_L=33	- -	MAX.	35	mA
V_{GT}		- -	MAX.	1	V
V_{GD}	V_D=V_{DRM} Tj=150 R_L=3.3K	- -	MIN.	0.2	V
I_L	I_G=1.2I_{GT}	-	MAX.	40	mA
				50	
I_H	I_T=100mA		MAX.	30	mA
dV/dt	V_D=540V Gate Open Tj=150		MIN.	1000	V/ s
(dI/dt)c					

ORDERING INFORMATION



MARKING

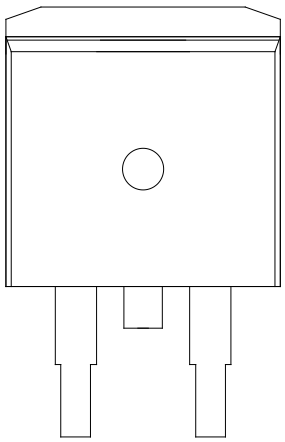


FIG.1 Maximum dissipation power vs RMS on-state current

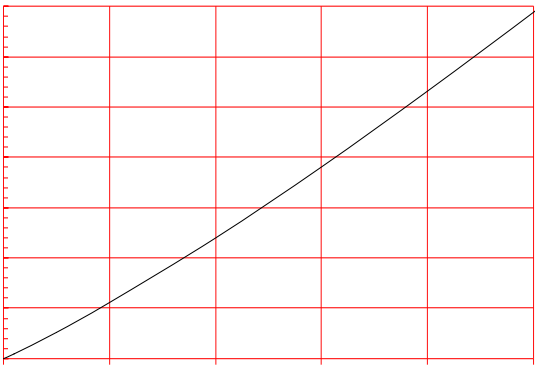
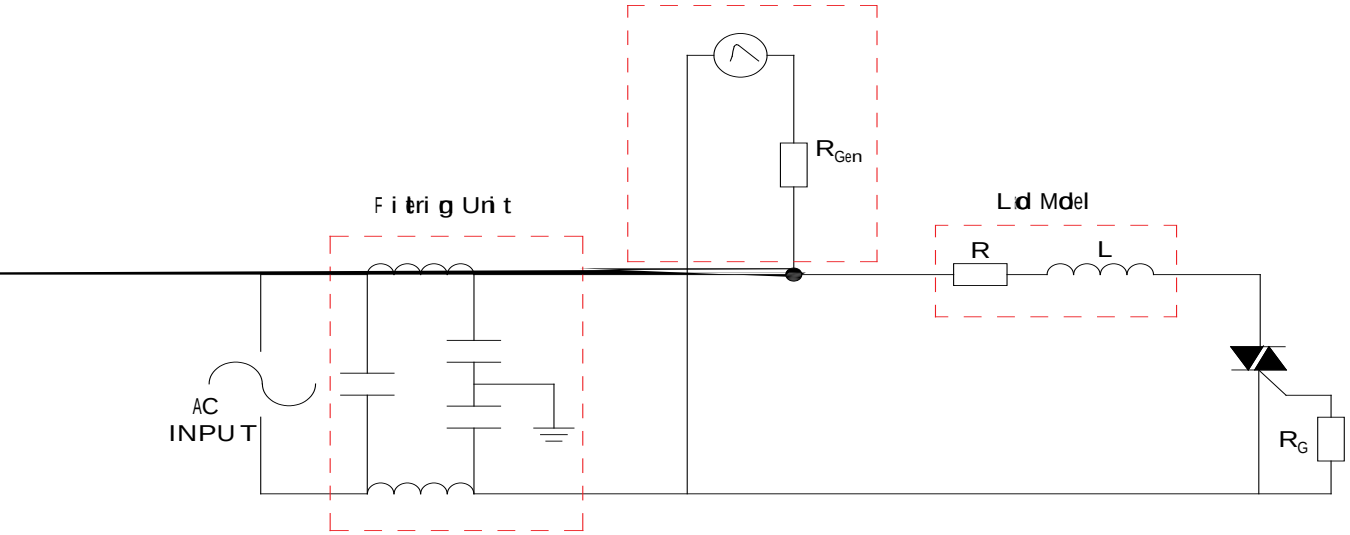


FIG.2: RMS on-state current vs case temperature

T0435H T0435H T0 435H 435H 435Hieie

FIG.8 Test circuit for dv/dt and commutation dv/dt according to IEC -61000-4-5 standards

IEC61000-4-5 Standards
Surge Generator



T0435H-8E

DELIVERY MODE

