



T0850H-6K 8A TRIAC

Rev.A.1.1

DESCRIPTION:

FUNCTION:

The T0850H-6K triac is a bidirectional switch in a TO-18 package. It can be used in AC power control applications such as motor speed control, lamp dimming, and phase shifting. It is suitable for switching AC loads up to 8A and 250V. The device is characterized by low on-state voltage drop and high peak current capability. It is available in a TO-18 package.

P (T _F =25 ;o r	e at 8 e	V _p -	3.5	kV
-------------------------------	-------------	------------------	-----	----

EL ECT (T_F=25 d RI CAL CHARACT

Symbol	Test Condition	Quadrant	Value	Unit
I _{GT}	V =12V R _L =33		MAX . 50 -	mA
V _{GT}			MAX . 1 -	V
V _G	V =V T _j =150 R _L =3.3K		MIN. 0.2 -	V
I _L	I _G =1.2I _{GT}		MAX . 60 -	mA
			90	
I _H	I _T =100mA		MAX . 55	mA
dV/dt	V =400V G at n T _j =150		MIN. e 3000	V /s
(dI/dt	f=150		MIN. 8)	A/ms
t _o	I _G =80 mA I _K =400mA I _K =40mA T _F =25		TYP . 5	s
t _{ff}			50	

5 AT

Symbol	Parameter	Value(MAX.)	Unit
V _{TM}	I _{TM} =11A t _p =380 s T _F =25	1.4	V
V _{T0}	T hr T _F =150 e	0.78	sh d d u
R	T _F =150 D	55 D	
I	V =V _{RM} V _R =V _{RRM}	T _F =25 D	5 A
I _{RRM}		T _F =150 D D	1 mA

T HERMAL RES 5

Symbol	Parameter	Value	Unit
R _{th(jc)}	j oti o cas - e)	1.7	(AC/W
R _{th(ja)}	j oti o am b - i)	70	/W

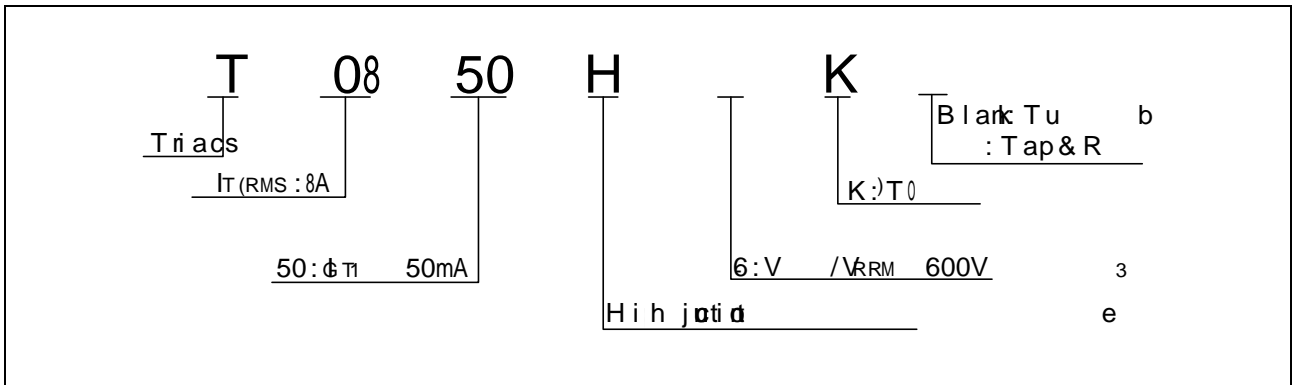
ORDER I

NG I

NFORMAT

I

ON



MARKI

NG

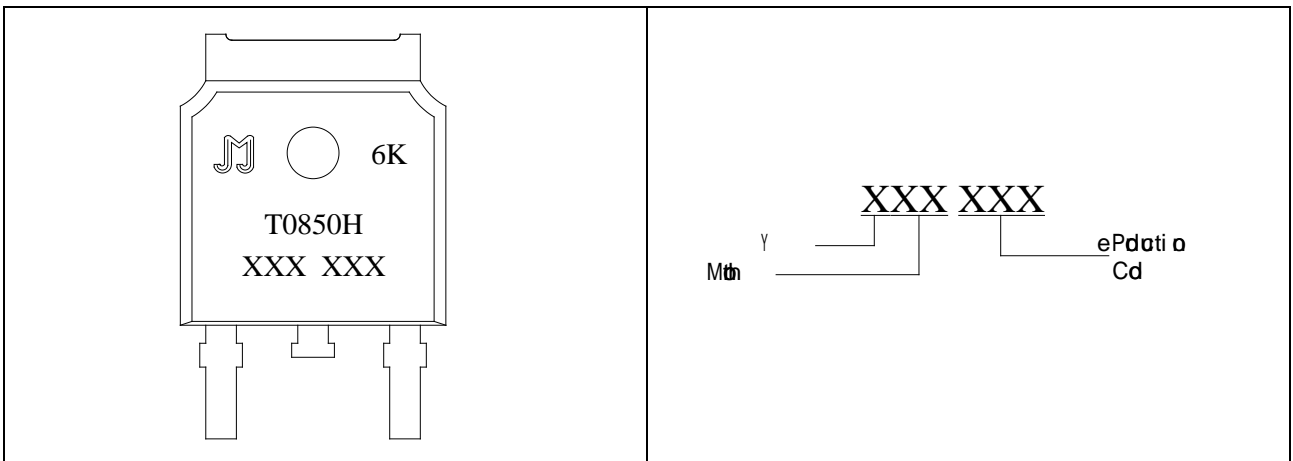


FIG.1 Maximum Power

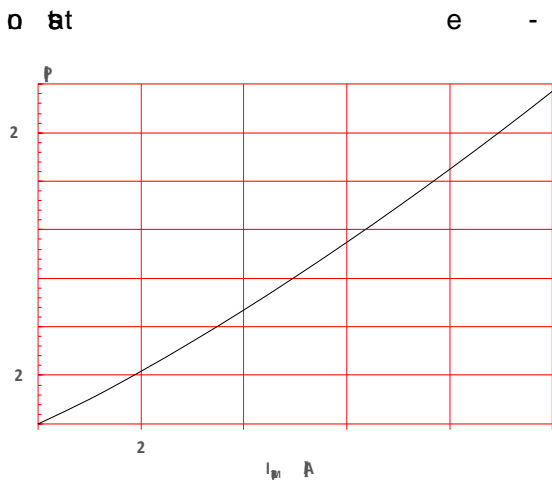


FIG.2: RMS Current vs. Junction Temperature

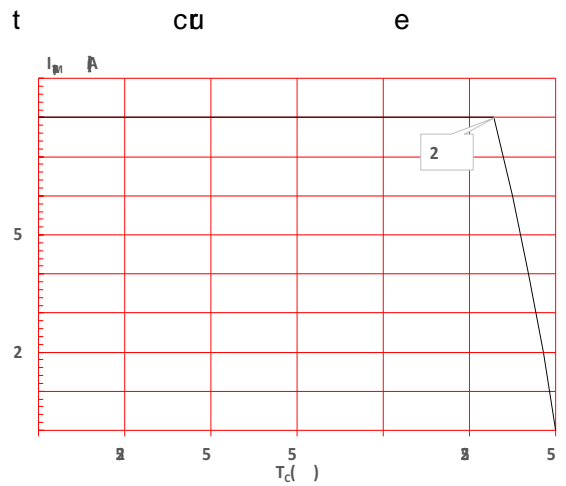


FIG.3: RMS Current vs. Junction Temperature

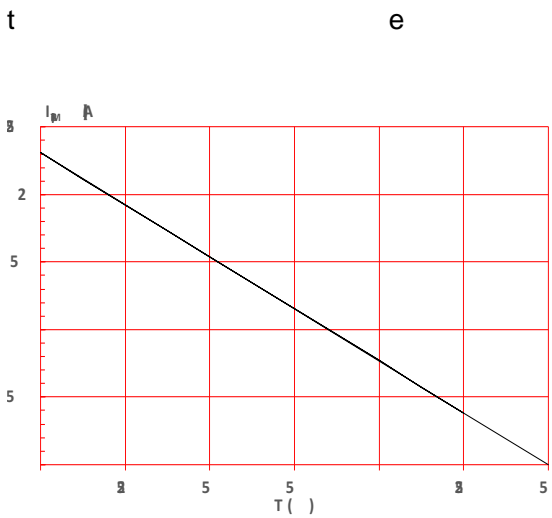


FIG.4: Surge Current vs. Pulse Width

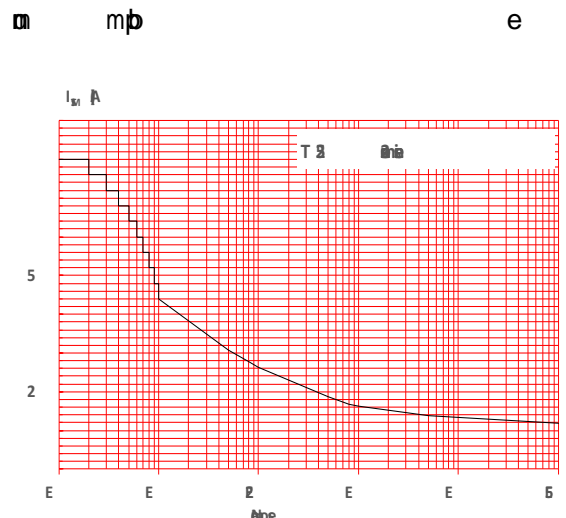


FIG.5: On-state Voltage vs. RMS Current

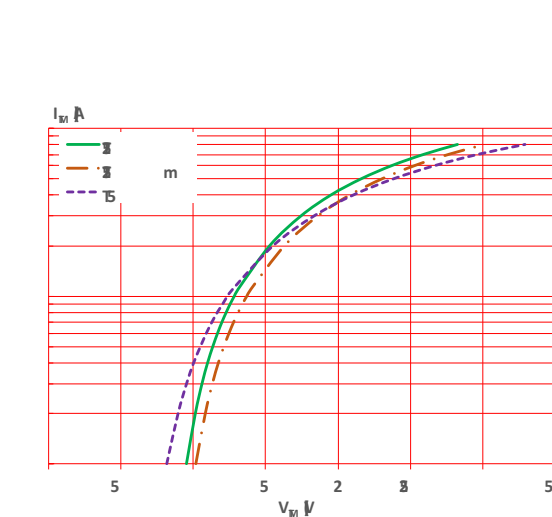


FIG.6: Normalized Characteristic vs. Pulse Width

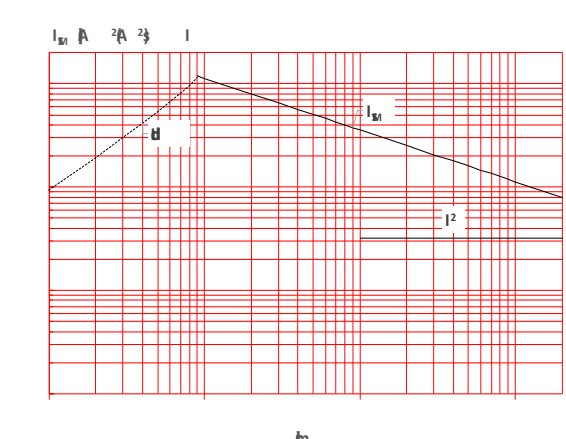


FIG.7: R
h d d i r c u
j o t i d

e
e
e

I a t i v
t a d l a t h i r c u
m p

e

e





ORDER INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
T0850H-6K	600	50	TO-252	80	Tube
T0850H-6K-TR				2,500	Tape & Reel

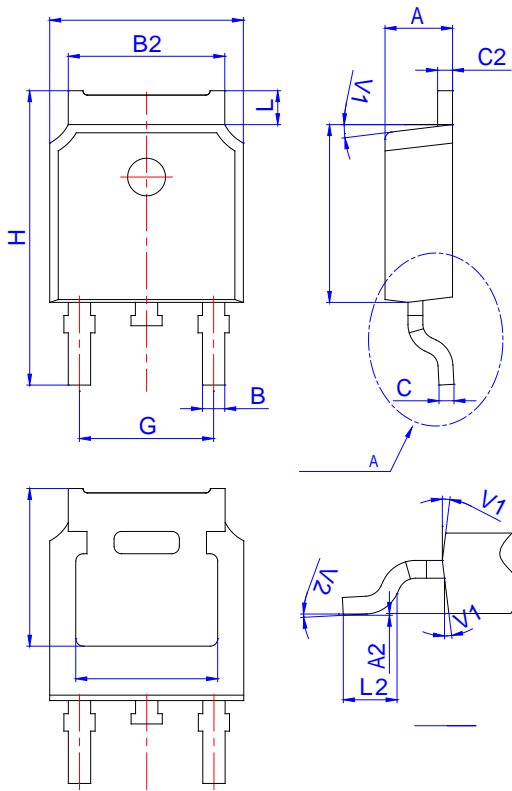
Document Revision History

	R	Change
Apr 11, 2023	A.1.0	Initial
Oct 23, 2023	A.1.1	Change $R_{th(jc)}$ & $R_{th(ja)}$

PACKAGE MECHANICAL DATA

MECHANICAL DATA

A



R	E					
	Millimetre			Inch		
	Min	Typ	Max	Min	Typ	Max
A	2.10		2.50	0.083		0.098
A2	0		0.15	0		0.006
B	0.66		0.86	0.026		0.034
B2	5.18		5.48	0.202		0.216
C	0.40		0.60	0.016		0.024
C2	0.44		0.58	0.017		0.023
	5.90		6.30	0.232		0.248
	5.30R			0.209R		
	6.40		6.80	0.252	E	0.268
	4.63	D		0.182	E	
G	4.47		4.67	0.176		0.184
H	9.50		10.70	0.374		0.421
L	1.09		1.21	0.043		0.048
L2	1.35		1.65	0.053		0.065
V1		7°			7°	1
V2	0°		6°	0°		6°

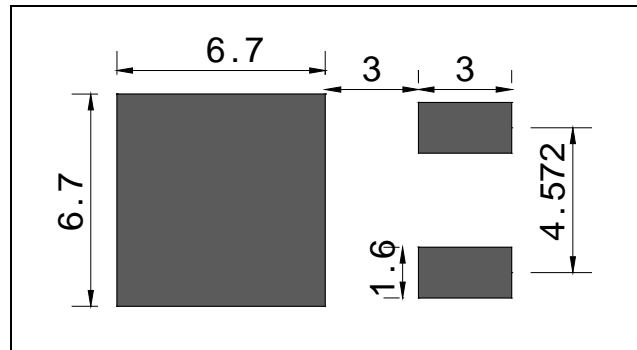
D

FOOTPRINT

-T -252 (mm)

RI

NOT



DEL I V

ERWDE

