T3050H-8A 30A TRIAC

Rev.A.1.1

DESCRIPTION:

The T3050H-8A 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, T3050H-8A provides a very high switching capability up to junction temperatures of 150°C. By using an internal ceramic pad, T3050H-8A provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TO-220A 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 pea/P <</MCID 28 >>BDC 0.004 Tc -0.002 Tw 12 0 0 12 62.04 268.2 Tm [(R)6 (epetDo[

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.7)	V_{pp}	1.2	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =33	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1.3	V
V_{GD}	V_D = V_{DRM} T_j =150 R_L =3.3k	- -	MIN.	0.15	V
I_L	I_G =1.2I_{GT}	-	MAX.	80	mA
				90	
I_H	I_T =500mA		MAX.	60	mA
dV/dt	V_D=540V Gate Open T_j =150		MIN.	2000	V s
(dI/dt)c	G 9 G W F j=9150V 7		MIN.	30	A/ms
t_{on}	I_G=80mA I_A=400mA I_R=40mA T_j=25		TYP.	15	s
t_{off}				100	

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX .)	Unit
V_{TM}	I_{TM} =42A t_p=380 s	T_j=25	1.5	V
V_{TO}	Threshold voltage	T_j=150	0.7	V
R_D	Dynamic resistance	T_j=150	16	m
I_{DRM}	V_D = V_{DRM} V_R = V_{RRM}	T_j=25	8	A
I_{RRM}		T_j=150	8	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{th(j-c)}$	junction to case (AC)	1.45	/W
$R_{th(j-a)}$	junction to ambient (AC)	60	/W

ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
T3050H-8A	800	50	TO-220A(Ins)	50	Tube

Document Revision History

Date	Revision	Changes
Apr.10, 2023	A.1.0	Last updated
Oct.11, 2025	A.1.1	1

PACKAGE MECHANICAL DATA

