T4050H-6Z 40A TRIAC

Rev.A.1.1

DESCRIPTION:

The T4050H-6Z 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, T4050H-6Z provides a very high switching capability up to junction temperatures of 150°C. s.

Average gate power dissipation (T_j=150)	$P_{G(AV)}$	1	W
Peak gate power	P_{GM}	40	W
Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	2	kV

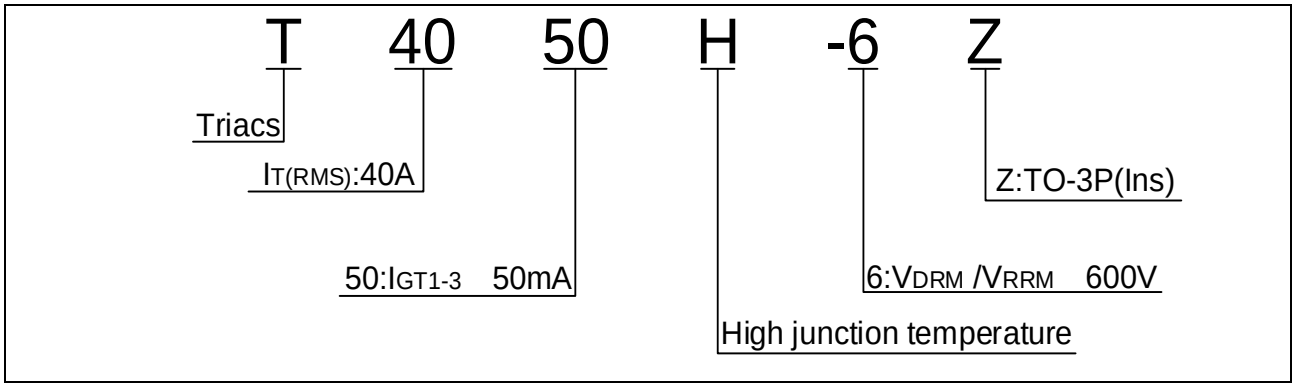
ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
I_{GT}	V_D =12V R_L =33Ω	- -	MAX.	50	mA
V_{GT}		- -	MAX.	1.3	V
V_{GD}	V_D =V_{DRM} T_j =150 R_L =3.3kΩ	- -	MIN.	0.2	V
I_L	I_G =1.2I_{GT}	-	MAX.	80	mA
				150	
I_H	I_T =1A		MAX.	80	mA
dV/dt	V_D=400V Gate Open T_j =150		MIN.	1800	V/μs
(dI/dt)c	(dV/dt)c=20V/μs, T_j=150		MIN.	30	A/ms
t_{on}	I_G=80mA I_A=400mA I_R=40mA T_j=25		TYP.	5	μs
t_{off}				50	

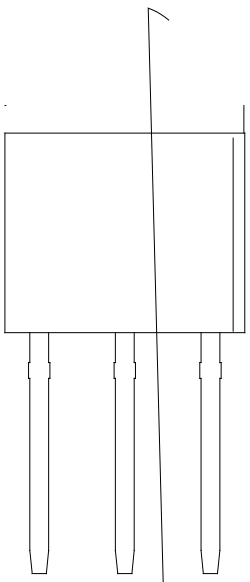
STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
V_{TM}	I_{TM} =60A t_p=380μs	T_j=25	1.4	V
V_{TO}	Threshold voltage	T_j=150	0.72	V
R_D	Dynamic resistance	T_j=150	10	mΩ
I_{DRM}	V_D =V_{DRM} V_R =V_{RRM}	T_j=25	10	μA
I_{RRM}		T_j=150		

ORDERING INFORMATION



MARKING



T4050H-6Z

FIG.7 Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

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ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
T4050H-6Z	600	50	TO-3P(Ins)	30	Tube

Document Revision History

Date	Revision	Changes
Apr.10, 2023	A.1.0	Last updated
Oct.16, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

PACKAGE MECHANICAL DATA



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