JST41Z-600TW 40A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST41Z-600TW 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. JST41Z-600TW snubberless triac is especially recommended for use on inductive loads. It can be driven directly through the MCU I/O port.By using an internal ceramic pad, JST41Z-600TW provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TO-3P is RoHS compliant.

MAIN FEATURES

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
porP Supe6 (ns)14 (uc 0 Tw 2Td ( )Tj EMC /P56.4 3)0/MCID			
Tm8( )Tjj EM6T228U6(S)0 RRM6d (T)Tj 0.036 Tm [(P)T346U			

Peak gate current (t_p=20μs , T_j=125)	I_{GM}	8	A
Average gate power dissipation (T_j=125)	$P_{G(AV)}$	0.5	W
Peak gate power	P_{GM}	40	W

Peak pulse voltage

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

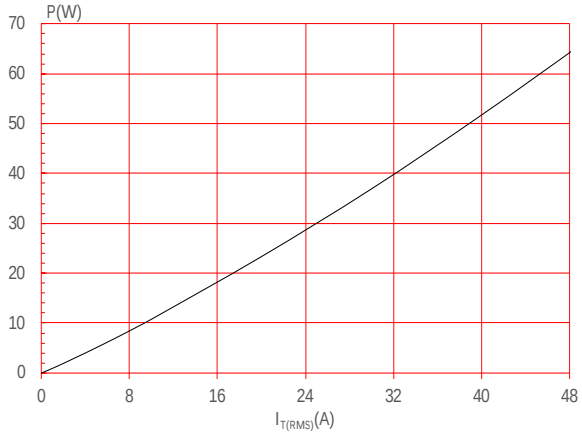


FIG.2: RMS on-state current versus case temperature



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



ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM}(V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
JST41Z-600TW	600	5	TO-3P(Ins)	30	Tube

Document Revision History

Date	Revision	Changes
Apr.11, 2023	A.1.0	Last updated
Oct.16, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA