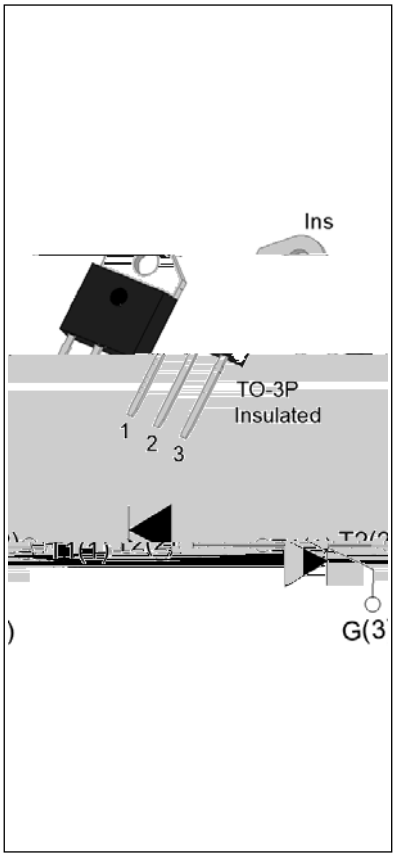
JST41Z-800GW 40A TRIAC

Rev.A.1.1

DESCRIPTION:

The JST41Z-800GW 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-800GW snubberless triac is especially recommended for use on inductive loads. By using an internal ceramic pad, JST41Z-800GW provides a rated insulation voltage of 2500 VRMS, complying with UL standards (File ref: E252906). Package TO-3P is RoHS compliant.



MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	40	A
V_{DRM} /V_{RRM}	800	V
I_{GT} / /	70/70/70	mA

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
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 ($T_C \leq$ 81)	$I_{T(RMS)}$	40	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	420	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		462	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	1000	A^2s
Critical rate of rise of on-state current (I_G=2 I_{GT} , f=100Hz , T_j=125)	dI/dt	100	A/μs
Peak gate current (t_p=20μs , T_j=125)	I_{GM}	8	A

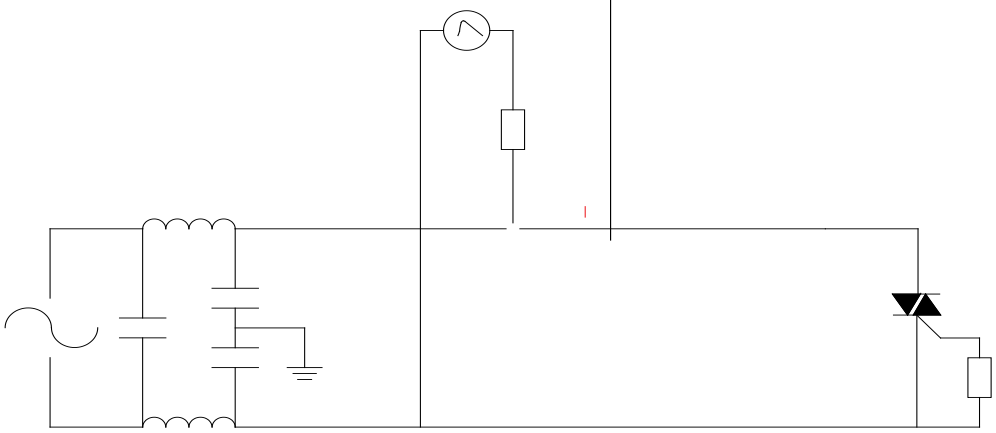
Average gate power dissipation (T_j=1

JST41Z-800GW

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-800GW	800	70	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

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