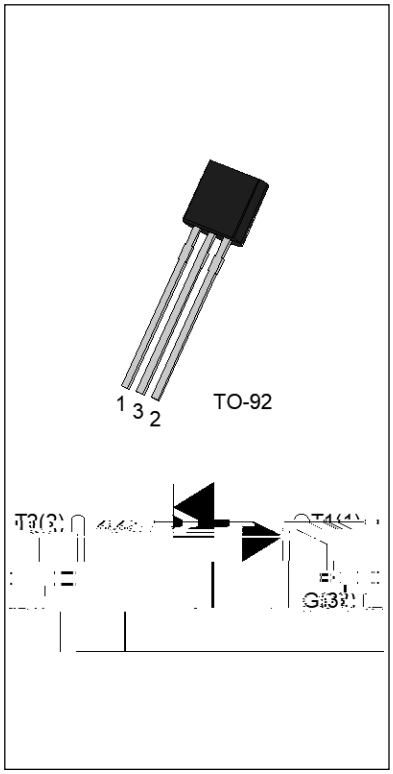
JST008U-800CW 0.8A TRIAC

Rev.A.2.1

DESCRIPTION:

The JST008U-800CW 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. JST008U-800CW snubberless triac is especially recommended for use on inductive loads. Complying with UL standards (File ref: E252906). Package TO-92 is RoHS compliant.



MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	0.8	A
V_{DRM} /V_{RRM}	800	V
I_{GT} / /	35/35/35	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 ($T_C \leq$ 51)	$I_{T(RMS)}$	0.8	A
Non repetitive surge peak on-state current (full cycle , t_p=20ms , T_j=25)	I_{TSM}	10	A
Non repetitive surge peak on-state current (full cycle , t_p=16.6ms , T_j=25)		11	
I^2t value for fusing (t_p=10ms , T_j=25)	I^2t	0.5	A^2s
Critical rate of rise of on-state current (I_G=2 × I_{GT} , f=100Hz , T_j=125)	dI/dt	80	A/μs
Peak gate current (t_p=20μs , T_j=125)	I_{GM}	1	A
Average gate power dissipation (T_j=125)	$P_{G(AV)}$	0.1	W
Peak gate power	P_{GM}	5	W

Peak pulse voltage (T_j=25 ; non-repetitive,off-state;FIG.7)	V_{pp}	1	kV

ELECTRICAL CHARACTERISTICS (T_j=25 unless otherwise specified)

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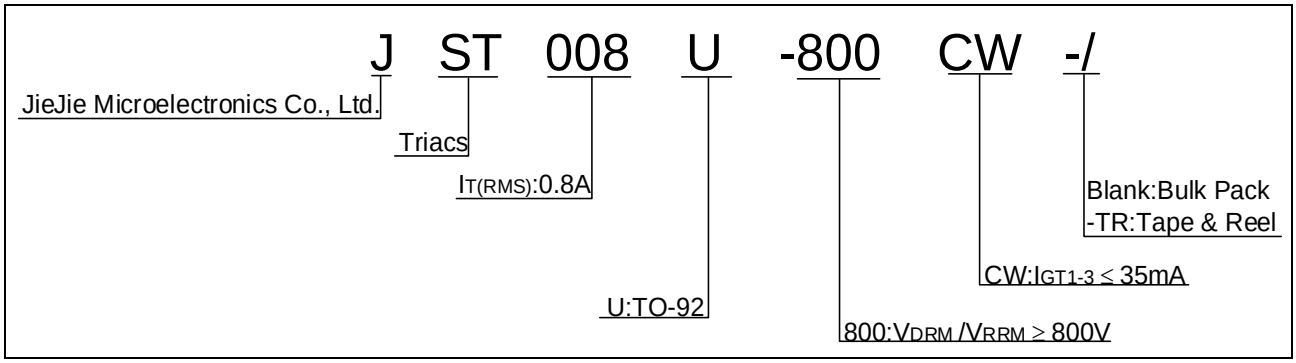
ORDERING INFORMATION



MARKING

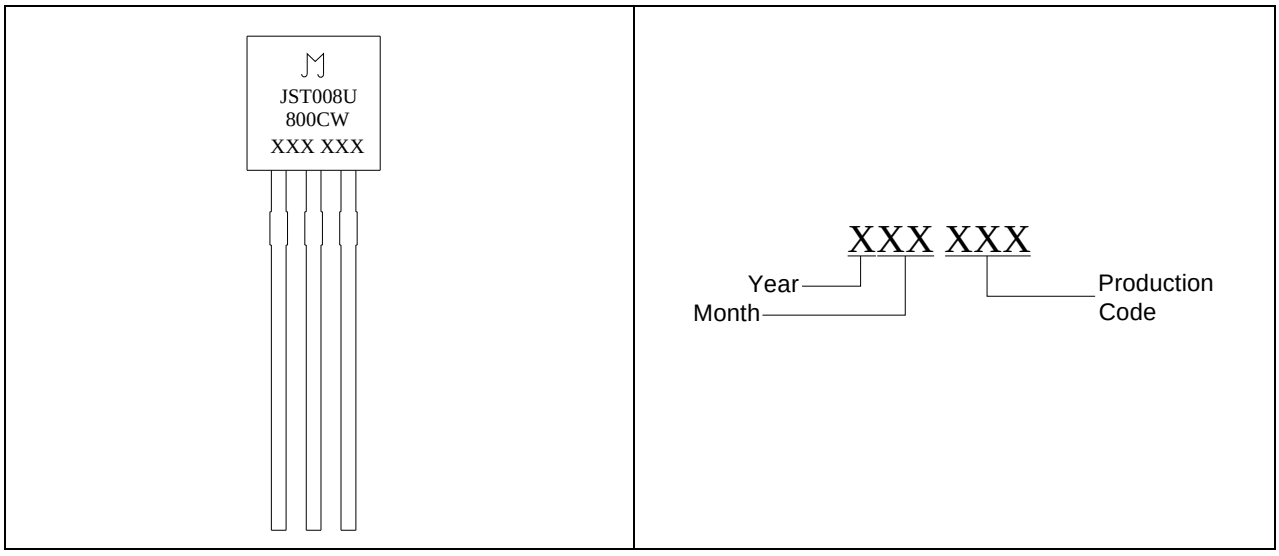


FIG.1: Maximum power dissipation versus RMS on-state current

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

ORDERING INFORMATION

Order code	Voltage V_{DRM}/V_{RRM} (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
JST008U-800CW	800	35	TO-92	1,000	Bulk Pack
JST008U-800CW-TR				2,000	Tape & Reel

Document Revision History

Date	Revision	Changes
Apr.11, 2023	A.1.0	Last updated
Mar.28, 2025	A.2.0	Renew PACKAGE MECHANICAL DATA
Sept.28, 2025	A.2.1	Revise PACKAGE MECHANICAL DATA

PACKAGE MECHANIC ħ

DELIVERY MODE

PACKAGE	OUTLINE	BAG (PCS)	INNER BOX (PCS)	CARTON BOX (PCS)
TO-92	Bulk Pack	1,000	10,000	50,000

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
P	12.40	12.70	13.00	0.488	0.500	0.512
P0	12.40	12.70	13.00	0.488	0.500	0.512
P1	3.55	3.85	4.15	0.140	0.152	0.163
P2	5.95	6.35	6.75	0.233	0.250	0.265
P	-1.00	0	1.00	-0.039	0	0.039
F1 F2	2.30	2.50	2.70	0.090	0.098	0.106
F1-F2	-0.10	0	0.10	-0.004	0	0.004
W	17.50	18.00	19.00	0.689	0.709	0.748
W0	5.50	6.00	6.50	0.217	0.236	0.256
W1	8.50	9.00	9.50	0.335	0.354	0.374
W2			1.00			0.039
D0	3.80	4.00	4.20	0.150	0.157	0.165
H	-1.00	0	1.00	-0.039	0	0.039
L1	2.50			0.098		
H	18.00	19.00	20.00	0.709	0.748	0.787

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