

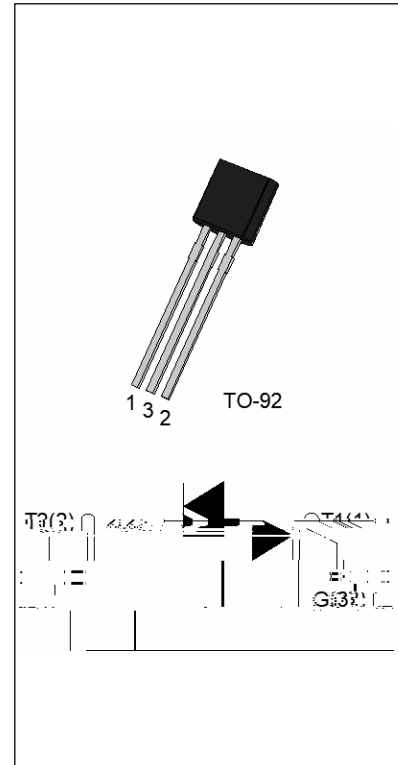


JST008U-800CW 0.8A TRIAC

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

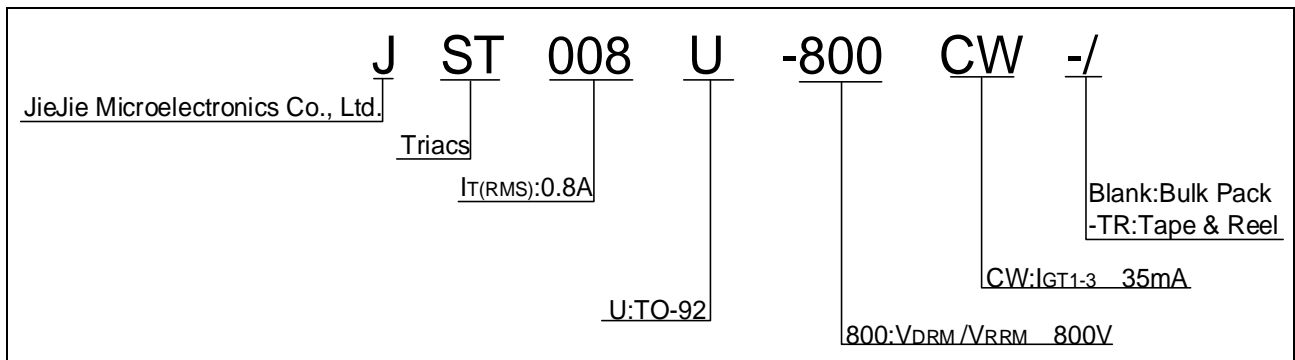
Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40-150	
Operating junction temperature range	T_j	-40-125	
Repetitive peak off-state voltage ($T_j=25^\circ C$)	V_{DRM}	800	V
Repetitive peak reverse voltage ($T_j=25^\circ C$)	V_{RRM}	800	V
RMS on-state current ($T_c = 51^\circ C$)	$I_{T(RMS)}$	0.8	A
Non repetitive surge peak on-state current (full cycle, $t_p=20ms$, $T_j=25^\circ C$)	I_{TSM}	10	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6ms$, $T_j=25^\circ C$)		11	
I^2t value for fusing ($t_p=10ms$, $T_j=25^\circ C$)	I^2t	0.5	A^2s
Critical rate of rise of on-state current ($I_G=2 \times I_{GT}$, $f=100Hz$, $T_j=125^\circ C$)	di/dt	80	$A/\mu s$
Peak gate current ($t_p=20\mu s$, $T_j=125^\circ C$)	I_{GM}	1	A
Average gate power dissipation ($T_j=125^\circ C$)	$P_{G(AV)}$	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
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ELECTRICAL CHARACTERISTICS ($T_j=25$ unless otherwise specified)

Symbol	Test Condition	Quadran Q
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ORDERING INFORMATION



MARKING

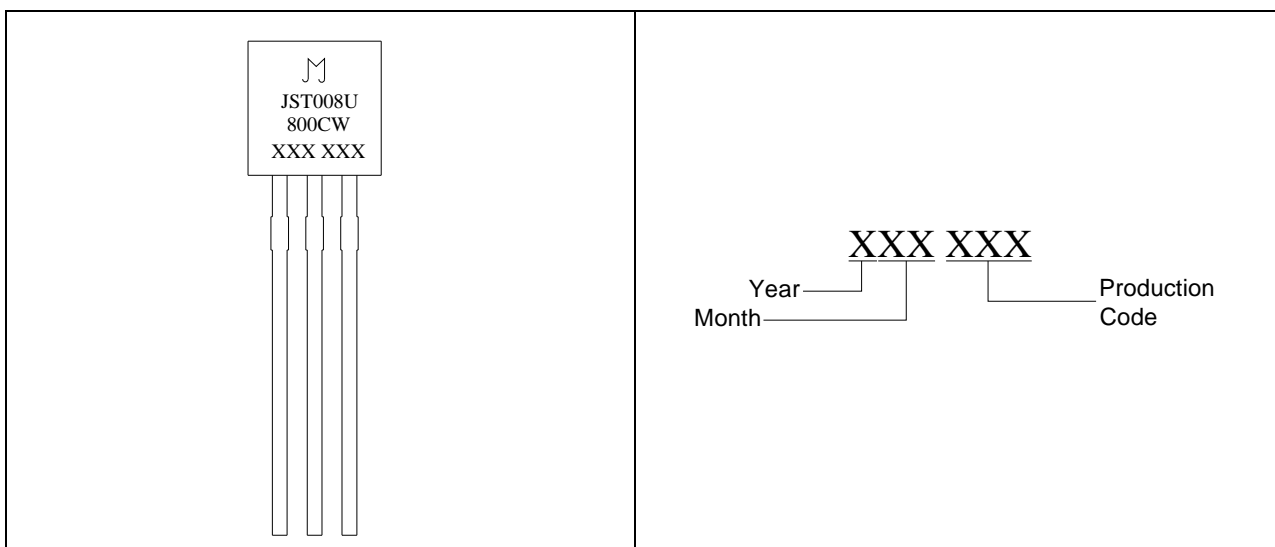


FIG.1: Maximum power dissipation versus RMS on-state current



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

ORDERING INFORMATION

Order code	Voltage V _{DRM} /V _{R_{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

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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