

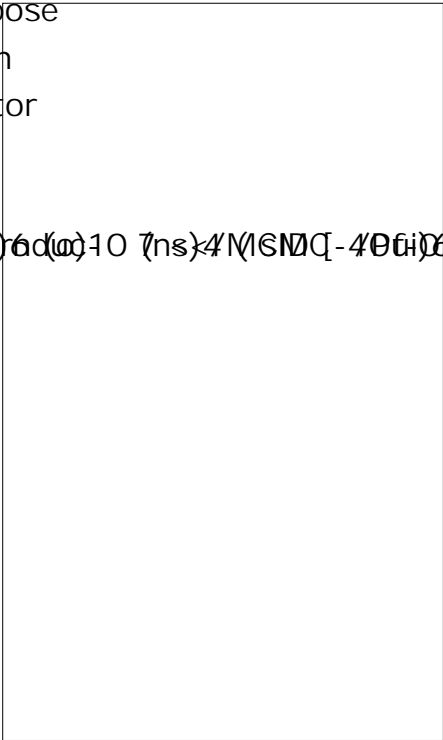


ACJT01V-1000SW 1A TRIAC

Rev.A.1.1

DESCRIPTION:

The ACJT01V-1000SW 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. The ACJT01V-1000SW embeds a TVS structure to absorb the inductive load.



Peak pulse voltage ( $T_j=25$ ; non-repetitive, off state; FIG.8)	$V_{pp}$	3.75	kV
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ELECTRICAL CHARACTERISTICS ( $T_j=25$  unless otherwise specified)

Symbol	Test Condition	Quadrant	Value		Unit
$I_{GT}$	$V_D = 12V$ $R_L = 33$	- -	MAX.	5	mA
$V_{GT}$		- -	MAX.	1	V
$V_{GD}$	$V_D = V_{DRM}$ $T_j = 125$ $R_L = 3.3k$	- -	MIN.	0.2	V
$I_L$	$I_G = 1.2I_{GT}$	-	MAX.	20	mA
				30	



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

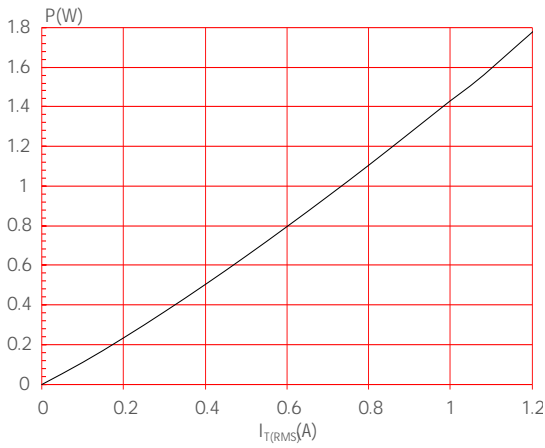


FIG.2: RMS on-state current versus case temperature

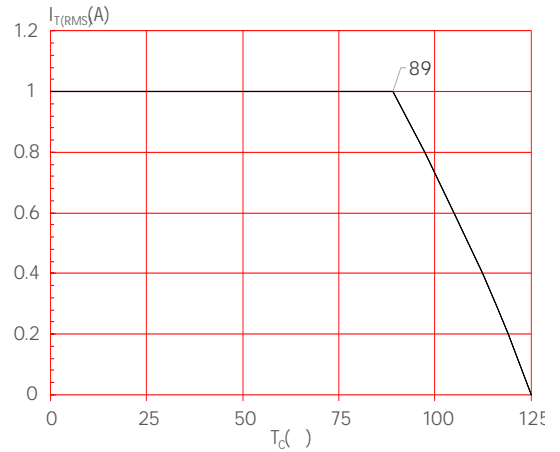


FIG.3: RMS on-state current versus ambient temperature (printed circuit board Copper thickness 35μm) (full cycle)

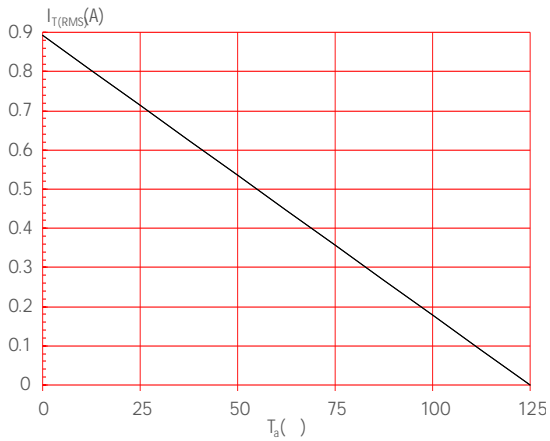


FIG.4: Surge peak onstate current versus number of cycles

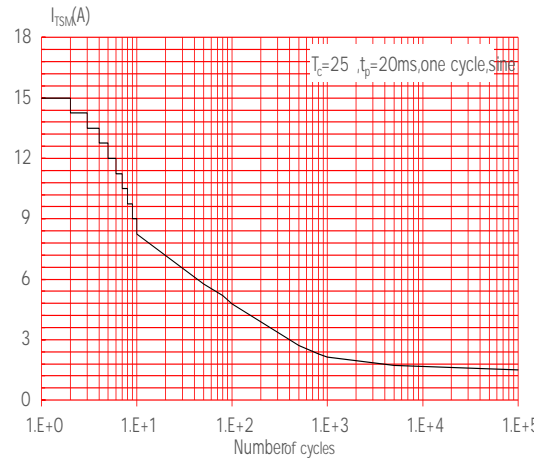


FIG.5: On-state characteristics

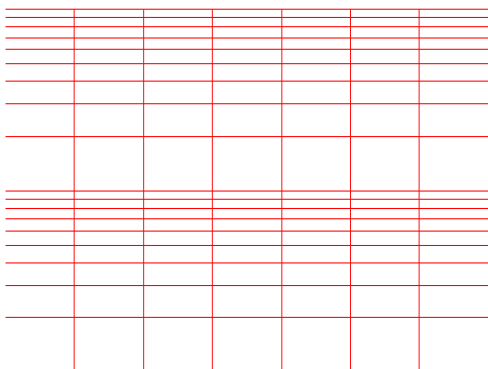


FIG.6: Non-repetitive surge peak onstate current for a sinusoidal pulse with width  $t_p < 20ms$ , and corresponding value of  $\frac{dI}{dt} < 60A/\mu s$

FIG.7: Relative variations of gate trigger current, holding current and latching current versus junction temperature



FIG.8 Test circuit for inductive and resistive loads to 100-5 standards



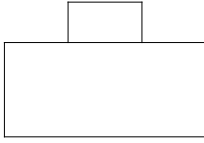
## ORDERING INFORMATION

Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
ACJT01V-1000SW	1000	10	SOT-223	4,000	Tape & Reel

## Document Revision History

Date	Revision	Changes
Apr.13, 2023 Oct23, 2025	A.1.0	Last updated

## PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	1.50	1.60	1.80	0.059	0.063	0.071
A1	0.01	0.06	0.10	0.001	0.002	0.004
B	2.90	3.00	3.10	0.114	0.118	0.122
B1	0.60	0.70	0.80	0.024	0.028	0.031
C	0.22	0.26	0.32	0.009	0.010	0.013
D	6.30	6.50	6.70	0.248	0.256	0.264
E	3.30	3.50	3.70	0.130	0.138	0.146
F	4.40			0.173		
F1	2.20			0.087		
G	0.50		1.00	0.020		0.039
H	1.50	1.75	2.00	0.059	0.069	0.079
J	6.70	7.00	7.30	0.264	0.276	0.287
K						

ACJT01V-1000SW

