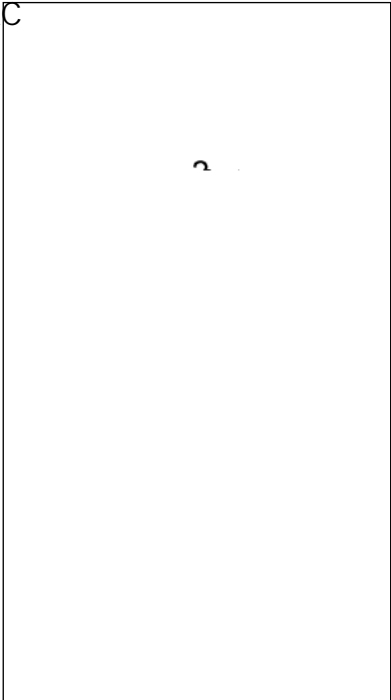




DESCRIPTION:

The JST04K-600CW 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 controller. JST04K-600CW snubberless triac is specially recommended for use on inductive loads. Package TO-252 is RoHS compliant.



MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	4	A
V_{DRM} / V_{RRM}	600	V
I_{GT} / I_{GM}	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 ($f=25$)	V_{DRM}	600	V
Repetitive peak reverse voltage ($f=25$)	V_{RRM}	600	V
RMS on-state current ($T=97$)	$I_{T(RMS)}$	4	A
Non repetitive surge peak on-state current (full cycle, $p \le 20ms$, $f=25$)	I_{TSM}	40	A
Non repetitive surge peak on-state current (full cycle, $p \le 16.6ms$, $f=25$)		44	
I^2t value for fusing ($t=10ms$, $T=25$)	I^2t	8	A^2s
Critical rate of rise of on-state current ($I_G=2 \times I_{GT}$, $f=100Hz$, $f=125$)	di/dt	80	A/s
Peak gate current ($t_p=20s$, $T_j=125$)	I_{GM}	4	A
Average gate power dissipation ($f=125$)	$P_{G(AV)}$	0.5	W
Peak gate power	P_{GM}	10	W

Peak pulse voltage ($T_j=25$; non-repetitive, of state; FIG.8)	V_{pp}	4	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.	35	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.	50	mA

ORDERING INFORMATION

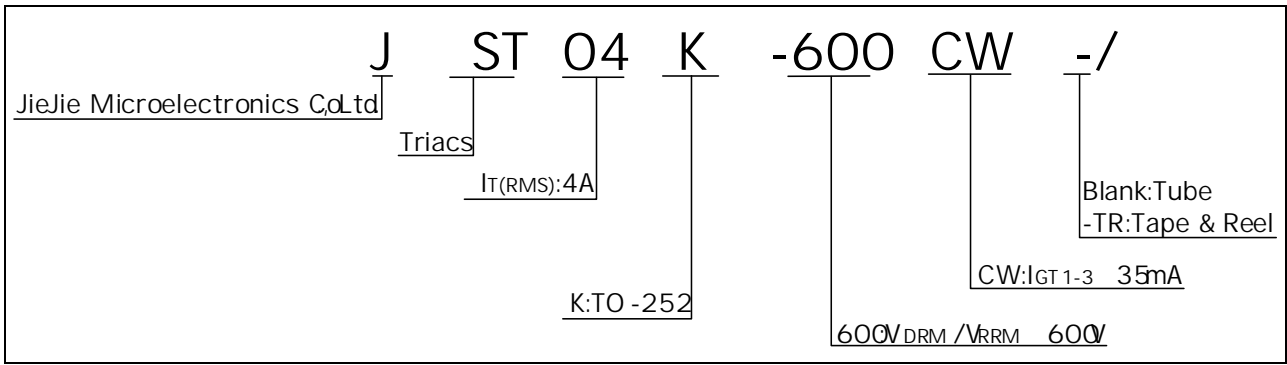


FIG.1 : Maximum power dissipation versus RMS on-state current

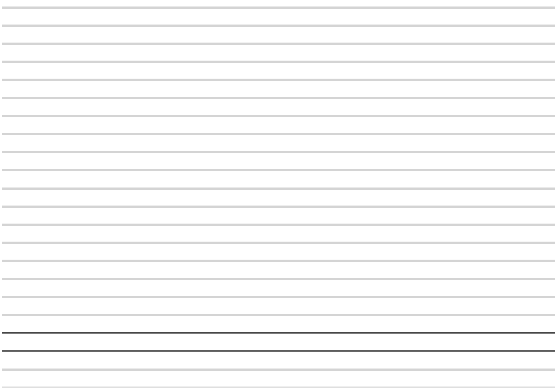
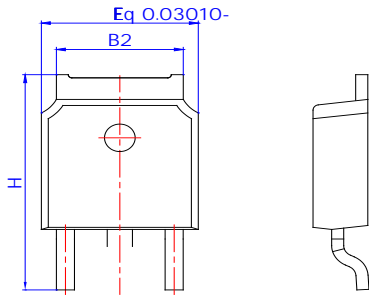


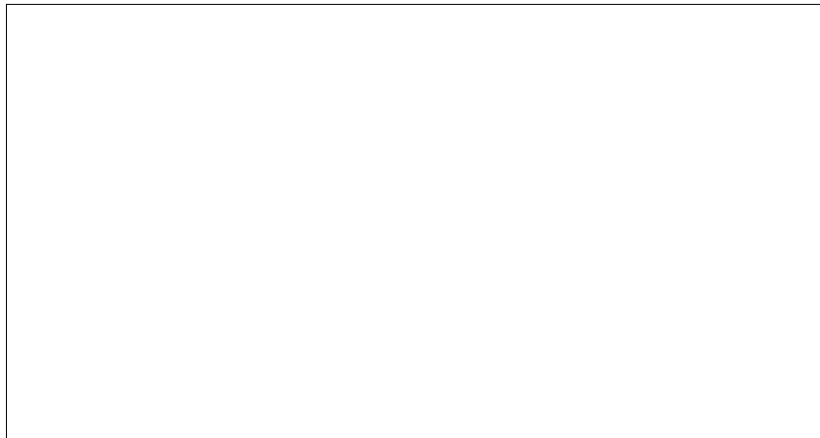
FIG.2: RMS on-state current versus case temperature

JST04K-600CW

PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.10		2.50	0.083		0.098
A2	0		0.15	0		0.006
B	0.66		0.86	0.026		0.034
B2	5.18		5.48	0.202		0.216
C	0.40		0.60	0.016		0.024
C2	0.44		0.58	0.017		0.023
D	5.90		6.30	0.232		0.248
D1						
E	6.40		6.80	0.252		0.268
E1	4.63			0.182		
G	4.47		4.67	0.176		0.184
G1	2.18		2.38	0.086		0.094
L	1.09		1.21	0.043		0.048
L2	1.35		1.65	0.053		0.065



DELIVERY MODE



