

**JST136C-600D 4A TRIAC**

Rev.A.1.1

**DESCRIPTION:**

The JST136C-600D 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. From T2 terminals to external heatsink. Package TO-220C is RoHS compliant.

**MAIN FEATURES****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 ( $T_j=25^\circ\text{C}$ )	$V_{DRM}$	600	V
Repetitive peak reverse voltage ( $T_j=25^\circ\text{C}$ )	$V_{RRM}$	600	V
RMS on-state current ( $T_c=110^\circ\text{C}$ )	$I_{T(RMS)}$	4	A
Non repetitive surge peak on-state current (full cycle, $t_p=20\text{ms}$ , $T_j=25^\circ\text{C}$ )	$I_{TSM}$	35	A
Non repetitive surge peak on-state current (full cycle, $t_p=16.6\text{ms}$ , $T_j=25^\circ\text{C}$ )		38.5	
$I^2t \leq 10.73$			0.48

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
				10	
$V_{GT}$		ALL	MAX.	1	V
$V_{GD}$	$V_D=V_{DRM}$ $T_j=125$ $R_L=3.3k$	ALL	MIN.	0.2	V
$I_L$	$I_G=1.2I_{GT}$	-	MAX.	15	mA
		-		25	
$I_H$	$I_T=100mA$		MAX.	15	mA
$dV/dt$	$V_D=400V$ Gate Open $T_j=110$		MIN.	120	V/ $\mu s$
$(dV/dt)_c$	$(dI/dt)_c=1.8A/ms$ , $T_j=110$		MIN.	2.5	V/ $\mu s$
$t_{on}$	$I_G=20mA$ $I_A=200mA$ $I_R=20mA$		TYP.	1	$\mu s$
$t_{off}$	$T_j=25$			12	

## STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX.)	Unit
$V_{TM}$	$I_{TM}=5A$ $t_p=380\mu s$	$T_j=25$	1.7	V
$V_{TO}$	Threshold voltage	$T_j=125$	0.94	V
$R_D$	Dynamic resistance	$T_j=125$	124	m
$I_{DRM}$	$V_D=V_{DRM}$ $V_R=V_{RRM}$			$\mu A$
$I_{RRM}$				mA

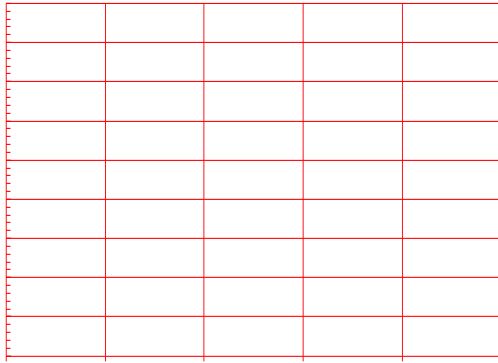
## THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{t(j-c)}$	junction to case (AC)	2.3	$^{\circ}W$

ORDERING INFORMATION

J ST 136 C -600

**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 <sub>DRM</sub> /V <sub>RRM</sub> (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		-	-			
JST136C-600D	600	5	10	TO-220C	50	Tube

**Document Revision History**


Date	Revision	Changes
Apr.14, 2023	A.1.0	Last update
Oct.16, 2025	A.1.1	Revise PACKAGE MECHANICAL DATA

**PACKAGE MECHANICAL DATA**



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