



## JST08E-600BW 8A TRIAC

Rev.A.1.1

### DESCRIPTION:

Triac

ON / OFF

ON

ON

JST08E -600BW

ON

600V 8A

### MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	8	A
$V_{DRM} / V_{RRM}$	600	V
$I_{GT} / /$	50 / 50 / 50	mA

### ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Storage Temperature	$T_s$	-40 ~ 150	
Operating Temperature	$T_j$	-40 ~ 125	
Repetitive Peak Forward Current ( $T_j = 25^\circ C$ )	$V_{DRM}$	600	V
Repetitive Peak Reverse Current ( $T_j = 25^\circ C$ )	$V_{RRM}$	600	V
RMS On-State Current ( $T_c = 107^\circ C$ )	$I_{T(RMS)}$	8	A
Non-repetitive Peak Forward Current ( $t_p = 20 \mu s, T_j = 25^\circ C$ )	$I_{TSM}$	80	A
Non-repetitive Peak Forward Current ( $t_p = 16.6 \mu s, T_j = 25^\circ C$ )		88	
Peak Forward Surge Current ( $p = 10 \mu s, T_j = 25^\circ C$ )	$I^2 t$	32	$A^2 s$
Gate Trigger Current ( $I_G = 2 \times I_{GT}, f = 100 Hz, T_j = 25^\circ C$ )	$d / dt$	100	$A / \mu s$
Peak Gate Current ( $p = 20 \mu s, T_j = 25^\circ C$ )	$I_{GM}$	4	A
Average Gate Power ( $T_j = 25^\circ C$ )	$P_{G(AV)}$	0.5	W
Peak Gate Power	$P_{GM}$	10	W

$P_{tot}$ ( $T_j=25$ ; $\rho_{\theta jc}$ FIG. 8)	$V_p$	2.5	k
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ELECTRICAL CHARACTERISTICS

Symbol	Test Condition	Quadrant	Value	Unit
$I_{GT}$	$V_D = 12V$ $R_{\theta} = 33$	- -	MA	50
$V_{GT}$		- -	MA	1
$V_{GD}$	$V_D = V_{DRM}$ $T_j = 25$ $R_{\theta} = 3.3$	- -	MIN	0.2
$I$	$I_G = 1 \cdot I_{GT}$	-	MA	50
				90
$I_H$	$I_T = 1000$		MA	50
$dV/dt$	$V_D = 400$ $V_{Dp}$ $T_j = 25$		MIN	2000
$(dI/dt)$	$(dV/dt) = 20$ $V/\mu s$ $T_j = 25$		MIN	12
$t_o$	$I_G = 800$ $I_A = 400$ $I_R = 400$ $T_j = 25$		TP	5
$t_b$				50

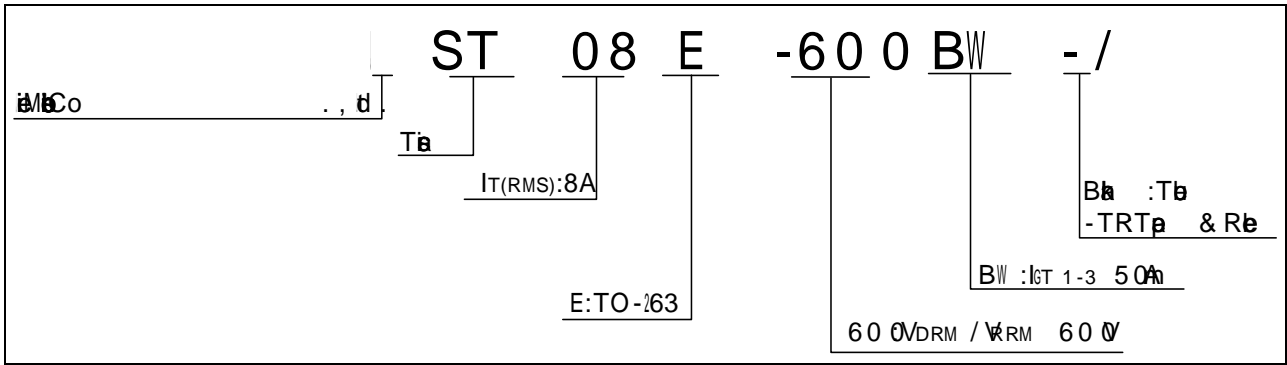
STATIC CHARACTERISTICS

Symbol	Parameter	Value(MAX.)	Unit
$V_{TM}$	$I_{TM} = 11A$ $t_p = 38 \mu s$ $T_j = 25$	1.5	V
$V_{TO}$	$T_j = 25$	0.8	V
$R_D$	$T_j = 25$	44	m
$I_{DRM}$	$V_D = V_{DRM}$ $V_R = V_{RRM}$	$T_j = 25$	5
$I_{RRM}$		$T_j = 25$	0.25

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
$R_{\theta jc}$	$R_{\theta jc}(AC)$	1.6	/W
$R_{\theta ja}$	$R_{\theta ja}(AC)$ , $r_{\theta ja} S = 2m^2$	45	/W

ORDERING INFORMATION



MARKING

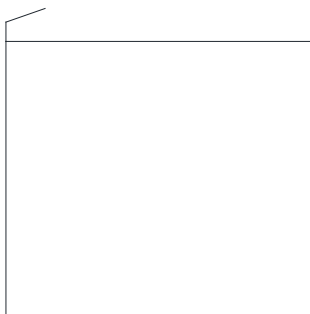


FIG.1:  $M_{T(RMS)}$

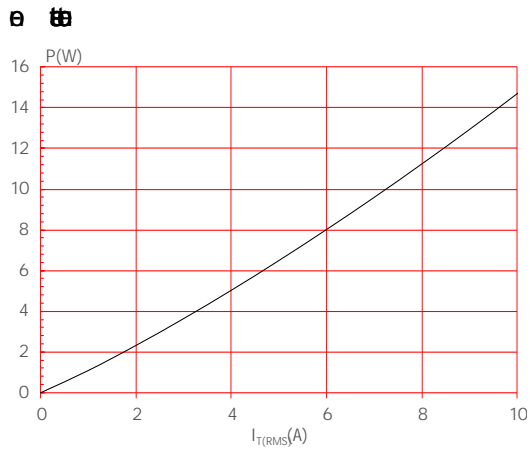


FIG.2: RMS  $\sigma$   $\tau$   $t_{0.5}$

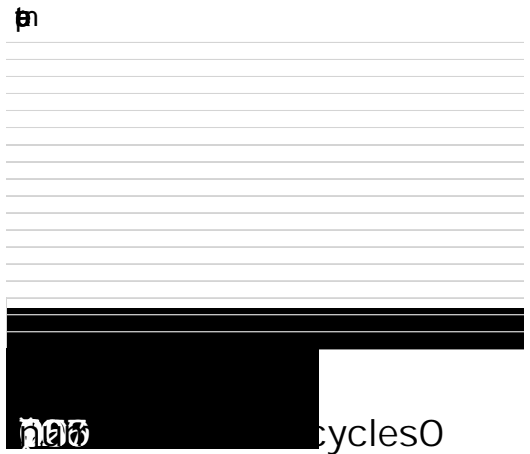
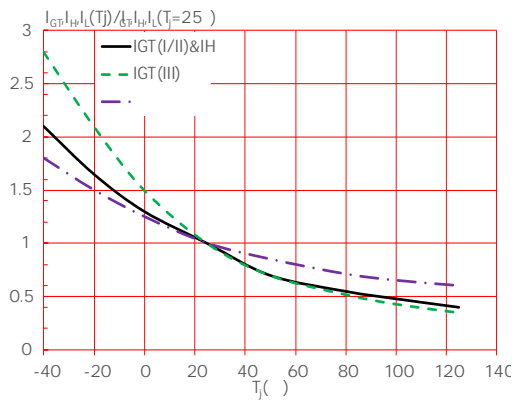


FIG.7:  $R_{\theta(jc)}$

$\theta_{jc}$

$\mu m$

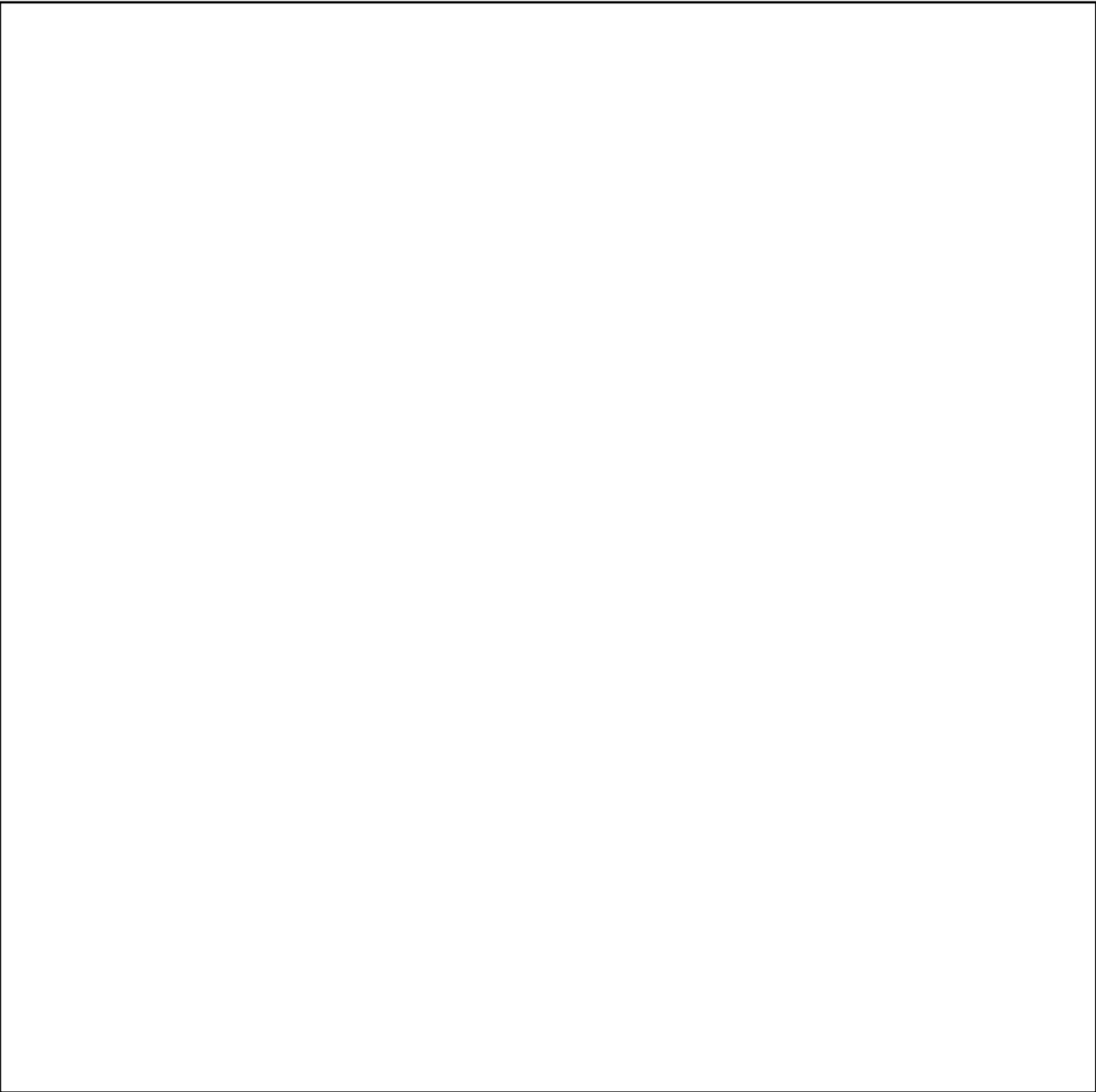




## ORDERING INFORMATION

Order code	Voltage $V_{DRM}/V_{RRM}$ (V)	IGT(mA)	Package	Base qty. (pcs)	Delivery mode
		- -			
JST08E-600BW	600	50	TO-263	50	Tube
JST08E-600BW-TR				800	





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