

BRBT0808CWBD

Rev.A Oct.-2023



蓝箭电子
BLUE ROCKET ELECTRONICS

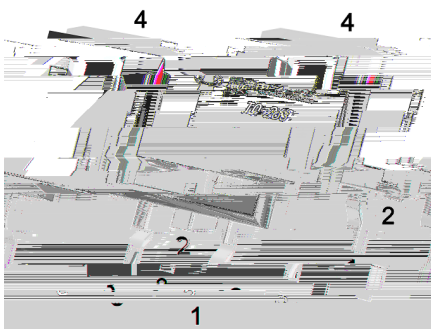
DATA SHEET

TO-263

Triac in a TO-263 Plastic Package.

Medium current triac, Low on state voltage drop, High reliability and stability, Low thermal resistance, HF Product.

Suitable for general purpose AC switching .Such as static relays, heating regulation, induction motor starting circuits, motor speed controllers, etc.



PIN1 Main Terminal 1 PIN 2 4 Main Terminal 2 PIN 3 Gate

/ Absolute Maximum Ratings($T_a=25$)

Parameter	Symbol	Rating	Unit
Repetitive peak off-state/reverse voltages($T_j=125$)	V_{DRM}/V_{RRM}	800	V
RMS on-state current($T_c=110$)	$I_{T(RMS)}$	8	A
Non repetitive surge peak on-state current(full cycle, $T_j=25^{\circ}C$)	$I_{TSM}(t=20ms)$	80	A
I^2t value for fusing($T_j=25$)	$I^2t_{(tp=10ms)}$	36	A ² s
Critical rate of rise of on-state current ($I_G=2I_{GT}$, $f=120Hz$ $T_j=125$)	dI/dt I-II-III	50	A/ μs
Peak gate current($t_p=20\mu s$ $T_j=125$)	I_{GM}	4.0	A
Average gate power dissipation($T_j=125$)	$P_{G(AV)}$	1	W
Operating junction temperature range	T_j	-40 125	
Storage junction temperature range	T_{stg}	-40 150	
Junction to ambient(AC)	$R_{th(j-a)}$	60	/W
Junction to case for(AC)	$R_{th(j-c)}$	1.6	

/ Electrical Characteristics($T_j=25$)

3 / Snubberless and logic level 3 quadrants)

Symbol	Test Conditions	Quadrant	Value		Unit
I_{GT}	$V_D=12V$ $R_L=30\Omega$	I-II-III	Max.	35	mA
V_{GT}	$V_D=12V$ $R_L=30\Omega$	I-II-III	Max.	1.3	V
V_{GD}	$V_D=V_{DRM}$ $R_L=3.3K\Omega$ $T_j=125$	I-II-III	Min.	0.2	V
I_L	$I_G=1.2I_{GT}$	I-III	Max.	50	mA
		II		60	
I_H	$I_T=100mA$		Max.	35	mA
(dV/dt)	$V_D=67\% V_{DRM}$ Gate Open	$T_j=125$	Min.	400	V/ μs
V_{TM}	$I_{TM}=11A$ $t_p=380\mu s$	$T_j=25$	Max.	1.55	V
I_{DRM}	$V_D=V_{DRM}$ $V_R=V_{RRM}$	$T_j=25$		10	μA
I_{RRM}		$T_j=125$		1	mA

/ Electrical Characteristic Curve

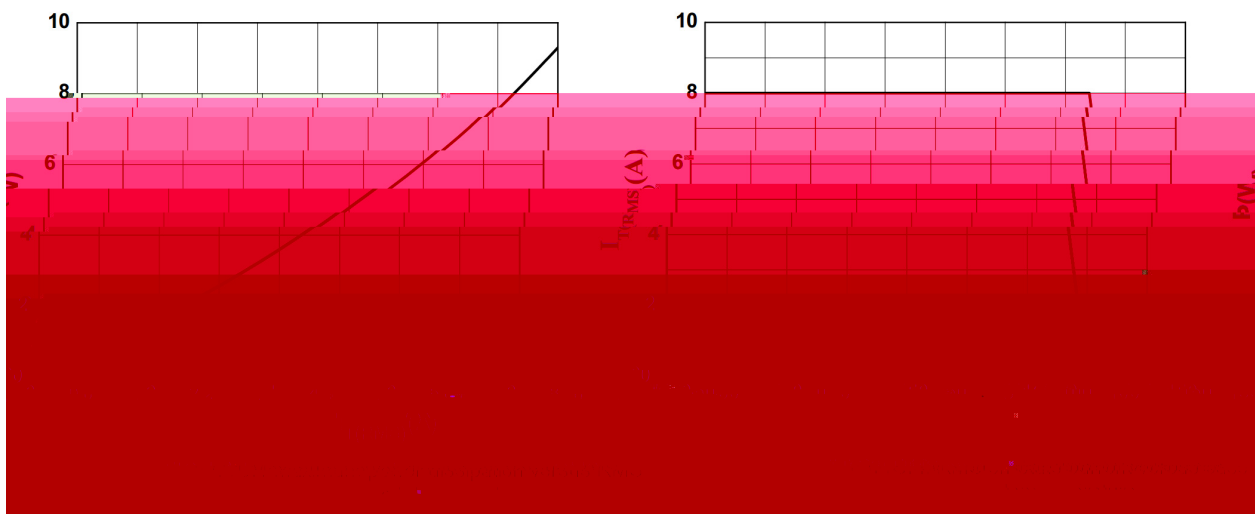
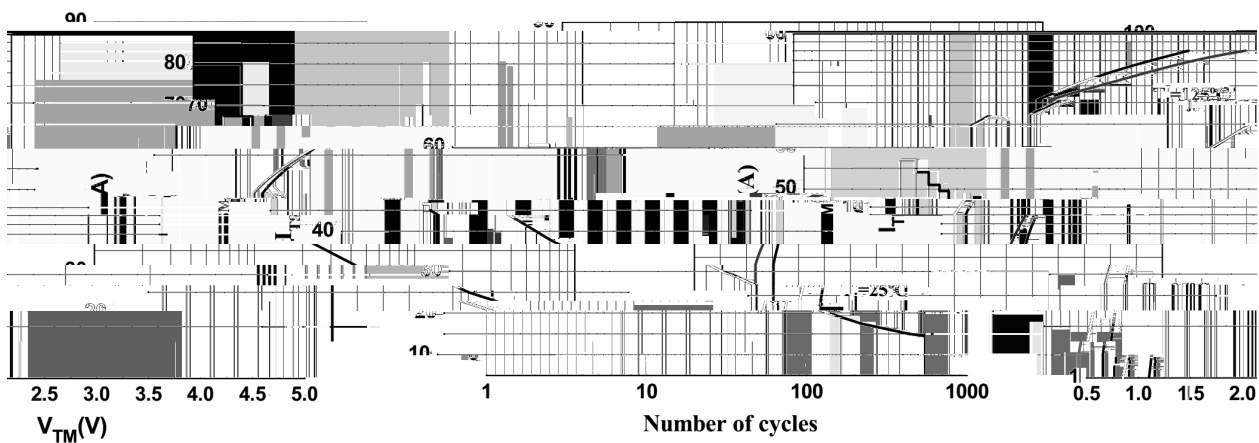


FIG.3: Surge peak on-state current versus

FIG.4: V

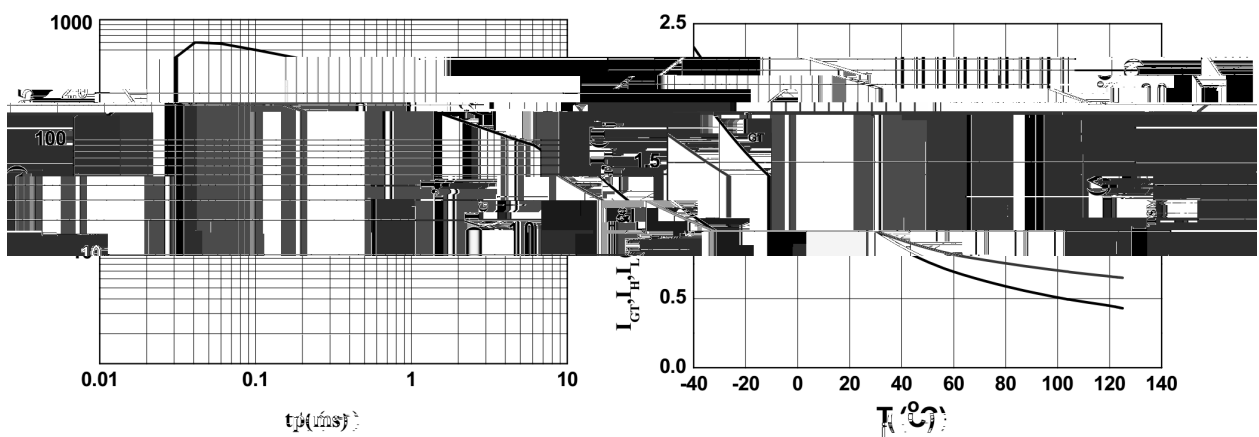


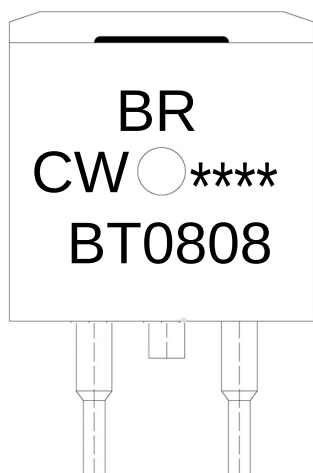
FIG.5: Normalized surge peak on-state current

During the surge test, the device is subjected to a pulse current of 10A for 100μs. The surge current is limited by the thermal resistance of the device. The surge current is limited by the thermal resistance of the device.

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/ Marking Instructions



BR

CW

I_{GT}

BT0808

Note:

BR: Company Code

CW: I_{GT} Bracket code

****: Lot No. Code, code change with Lot No

BT0808: Product Type Code

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