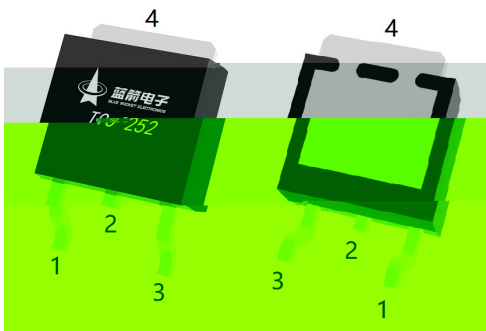
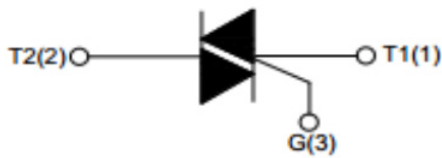


Triac in a TO-252 Plastic Package.

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($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Repetitive peak off-state/reverse voltages($T_j=125^\circ\text{C}$)	$V_{\text{DRM}}/V_{\text{RRM}}$	800	V
RMS on-state current($T_c=110^\circ\text{C}$)	$I_{\text{T(RMS)}}$	8	A
Non repetitive surge peak on-state current(full cycle, $T_j=25^\circ\text{C}$)	$I_{\text{TSM}(t=20\text{ms})}$	80	A
I^2t value for fusing($T_j=25^\circ\text{C}$)	$I^2t_{(tp=10\text{ms})}$	32	A^2s
Critical rate of rise of on-state current ($I_G=2I_{\text{GT}}$, $f=120\text{Hz}$ $T_j=125^\circ\text{C}$)	dI/dt I-II-III	50	$\text{A}/\mu\text{s}$
Peak gate current($t_p=20\mu\text{s}$ $T_j=125^\circ\text{C}$)	I_{GM}	4.0	A
Average gate power dissipation($T_j=125^\circ\text{C}$)	$P_{\text{G(AV)}}$	1.0	W
Operating junction temperature range	T_j	-40 125	
Storage junction temperature range	T_{stg}	-40 150	
Junction to ambient(AC)	$R_{\text{th(j-a)}}$	100	/W
Junction to case for(AC)	$R_{\text{th(j-c)}}$	3.1	

/ Electrical Characteristics($T_j=25^\circ\text{C}$)

3 / Snubberless and logic level 3 quadrants)

Symbol	Test Conditions	Quadrant	Value		Unit
I_{GT}	$V_D=12\text{V}$ $R_L=30\Omega$	I-II-III	Max.	10	mA
V_{GT}	$V_D=12\text{V}$ $R_L=30\Omega$	I-II-III	Max.	1	V
V_{GD}	$V_D=V_{\text{DRM}}$ $R_L=3.3\text{K}\Omega$ $T_j=125^\circ\text{C}$	I-II-III	Min.	0.2	V
I_{L}	$I_G=1.2I_{\text{GT}}$	I-III	Max.	25	mA
		II		30	
I_{H}	$I_T=100\text{mA}$		Max.	15	mA
(dV/dt)	$V_D=67\% V_{\text{DRM}}$ Gate Open	$T_j=125^\circ\text{C}$	Min.	40	$\text{V}/\mu\text{s}$
V_{TM}	$I_{\text{TM}}=11\text{A}$ $t_p=380\mu\text{s}$	$T_j=25^\circ\text{C}$	Max.	1.55	V
I_{DRM}	$V_D=V_{\text{DRM}}$ $V_R=V_{\text{RRM}}$	$T_j=25^\circ\text{C}$		5	μA
I_{RRM}		$T_j=125^\circ\text{C}$		0.35	mA

BRBT0808SWDP

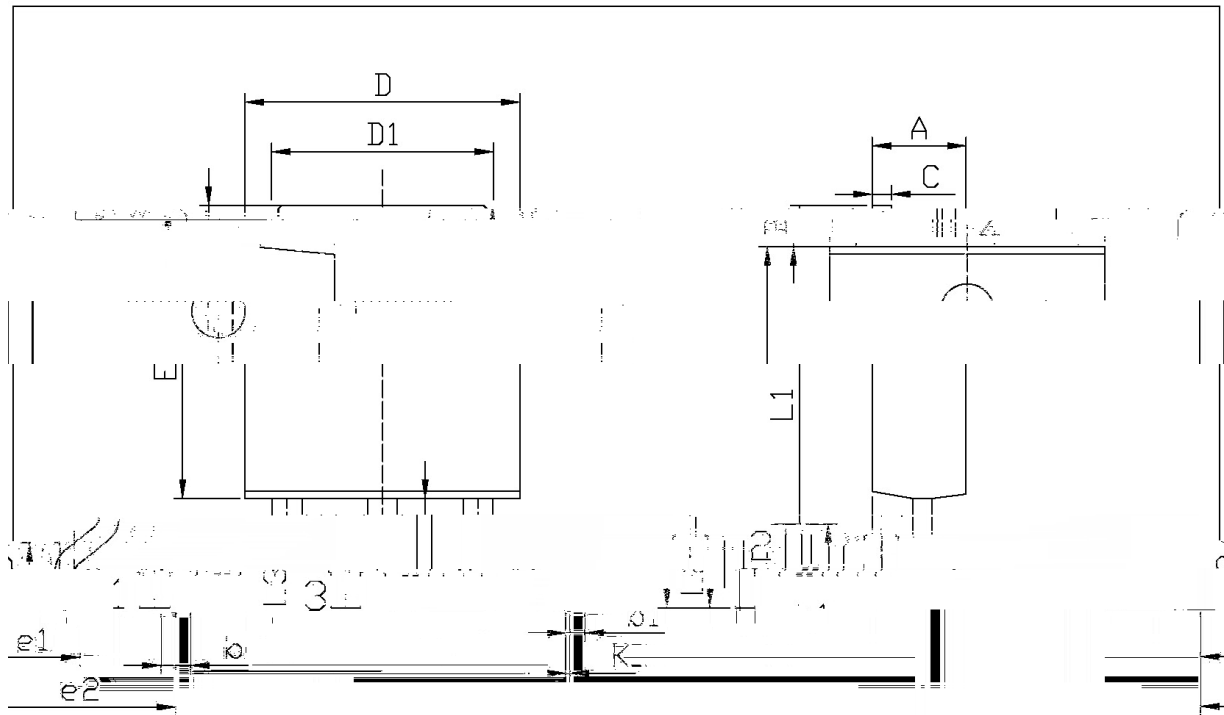
Rev.A Nov.-2023



蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

/ Package Dimensions



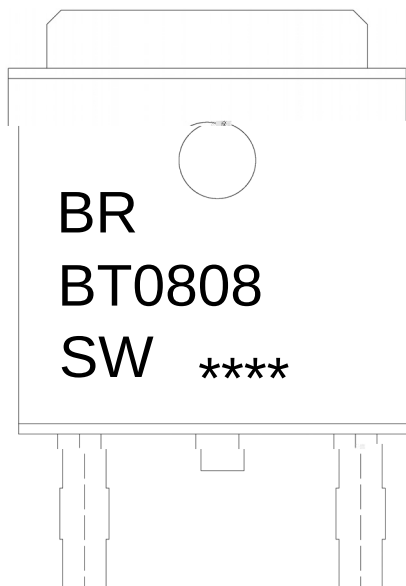
单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	2.20	2.40	E	5.95	6.25
B	0.95	1.25	e1	2.24	2.34
b	0.50	0.90	e2	4.43	4.73
b1	0.45	0.55	L1	9.45	9.95
C	0.45	0.55	L2	1.25	1.75
D	6.45	6.75	L3	0.60	0.90
D1	5.10	5.50	K	0.00	0.10

T0-252



/ Marking Instructions



Note:

BR: Company Code

BT0808: Product Type Code

SW: I_{GT} Bracket code

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



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Note:

- | | | | |
|---|---------|-----------|---|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245 5 | 5 0.5sec; | 2.Peak Temp.:245 5 , Duration:5 0.5sec. |
| 3 | 2 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260 5	10 1 sec.	Temp.:260±5	Time:10±1 sec
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/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box