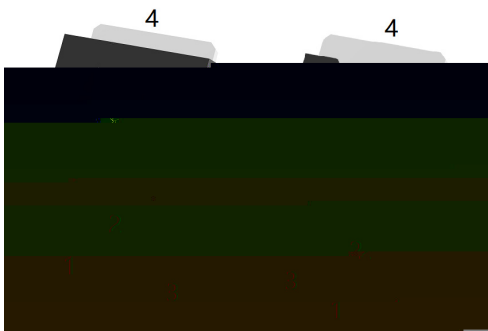


TO-252

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

/ Marking

See Marking Instructions.



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($T_j=25^\circ\text{C}$)	$I^2t_{(tp=10\text{ms})}$	36	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	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	

Symbol	Test Conditions	Quadrant	Value		Unit
I_{GT}	$V_D=12\text{V}$ $R_L=30\Omega$	I-II-III	Max.	35	mA
V_{GT}	$V_D=12\text{V}$ $R_L=30\Omega$	I-II-III	Max.	1.3	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.	50	mA
		II		60	
I_H	$I_T=100\text{mA}$		Max.	35	mA
(dV/dt)	$V_D=67\% V_{\text{DRM}}$ Gate Open	$T_j=125^\circ\text{C}$	Min.	400	$\text{V}/\mu\text{s}$

 $V_{\text{TM}61.50} T(\text{Gate}) T_j=6.1968-1.9 T_{\text{mt}3A9} 3.942.1(1(\text{Ma}47998t8803 T_{\text{m}(D)} T_j10.4958 034 29\text{TM}) T_j10.495 T_{\text{m}}-.0003 T_c.0026 T_w(\text{Peak gate c}0.4958 T(\text{Gate}) T_j=67.01$

/ Electrical Characteristic Curve

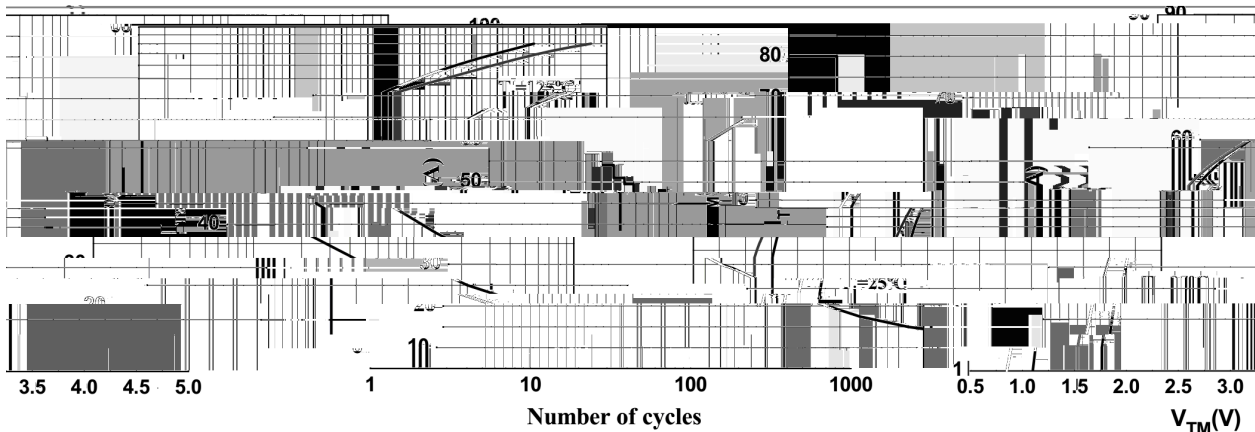
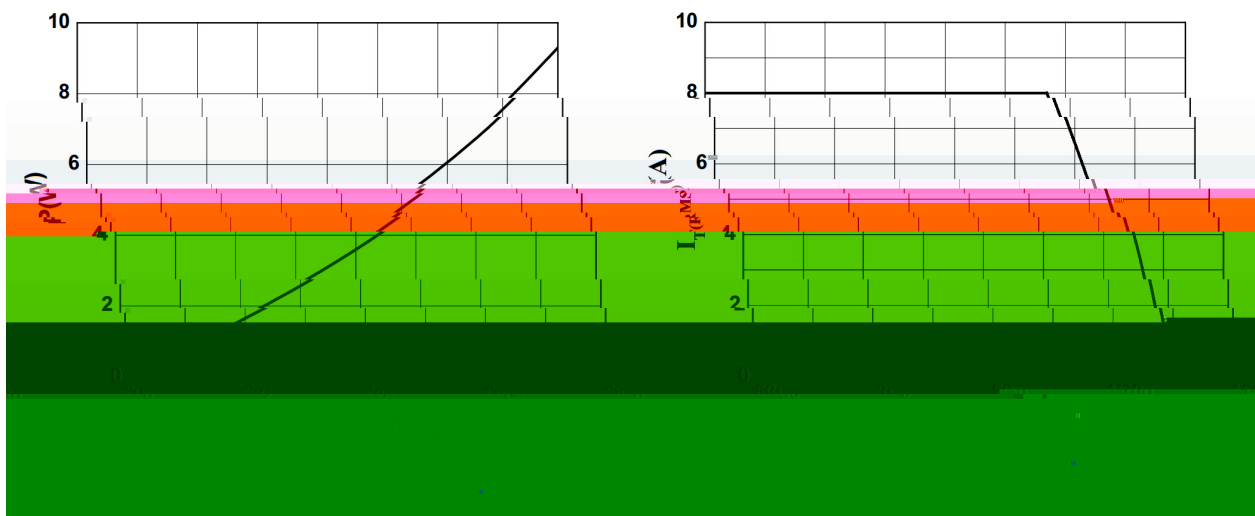


FIG.3: Surge peak on-state current versus

FIG.4: On-state current

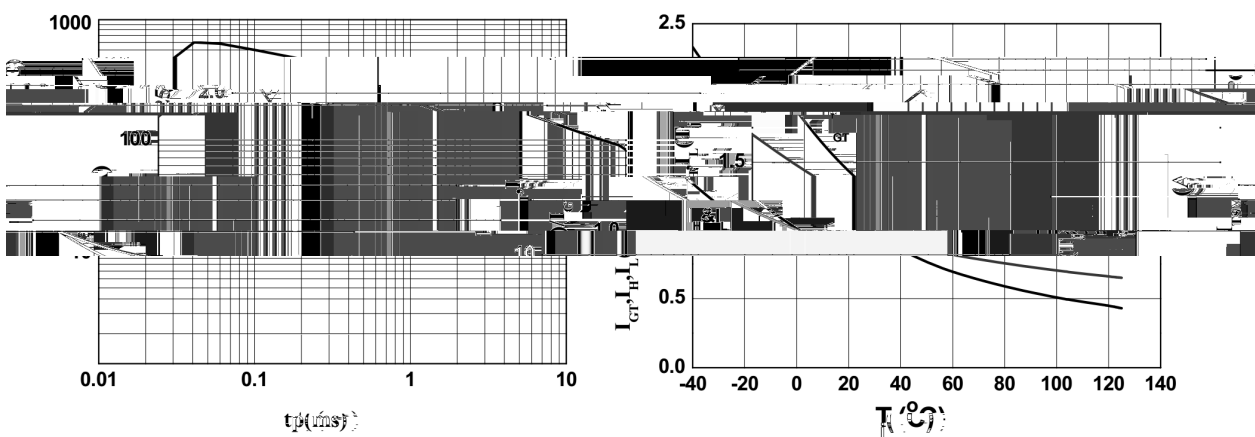


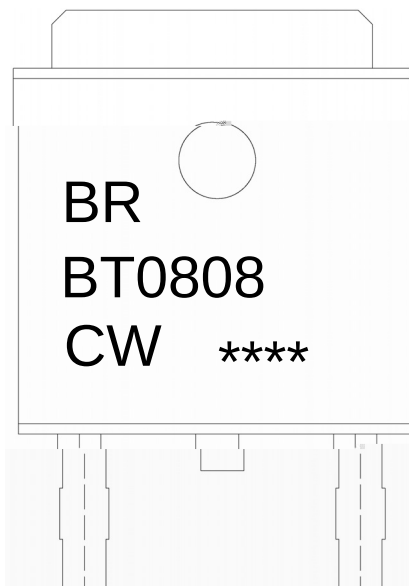
FIG.5: Non-repetitive surge peak on-state current

T (°C)



/ Package Dimensions

/ Marking Instructions



BR

BT0808

CW

I_{GT}

Note:

BR: Company Code

BT0808: Product Type Code

CW: I_{GT} Bracket Code

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

BRBT0808CWDP

Rev.A Oct.-2023



蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET