

BRBT0808EDP

Rev.A Sep.-2024



DATA SHEET

TO-252

Triac in a TO-252 Plastic Package.

Medium current triac, Low on state voltage drop,High reliability andw on stTwa.1(o)1 resi on st

Parameter	Symbol	Rating	Unit
Repetitive peak off-state/reverse voltages($T_j=25$)	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, $T_j=25^\circ\text{C}$)	$I_{TSM}(t=20\text{ms})$	65	A
I^2t value for fusing($T_j=25$)	$I^2t_{(tp=10\text{ms})}$	21	A^2s
Critical rate of rise of on-state current ($I_G = 2I_{GT}$, $f=120\text{Hz}$ $T_j=150$)	dI/dt I-II-III	80	A/ s
	dI/dt IV	40	
Peak gate current($t_p = 20$ s $T_j=150$)	I_{GM}	2.0	A
Average gate power dissipation($T_j=150$)	$P_{G(AV)}$	0.5	W
Operating junction temperature range	T_j	-40 125	
Storage junction temperature range	T_{stg}	-40 150	
Junction to ambient(AC)	$R_{th(j-a)}$	130	/W
Junction to case for(AC)	$R_{th(j-c)}$	5	

/ Electrical Characteristic Curve

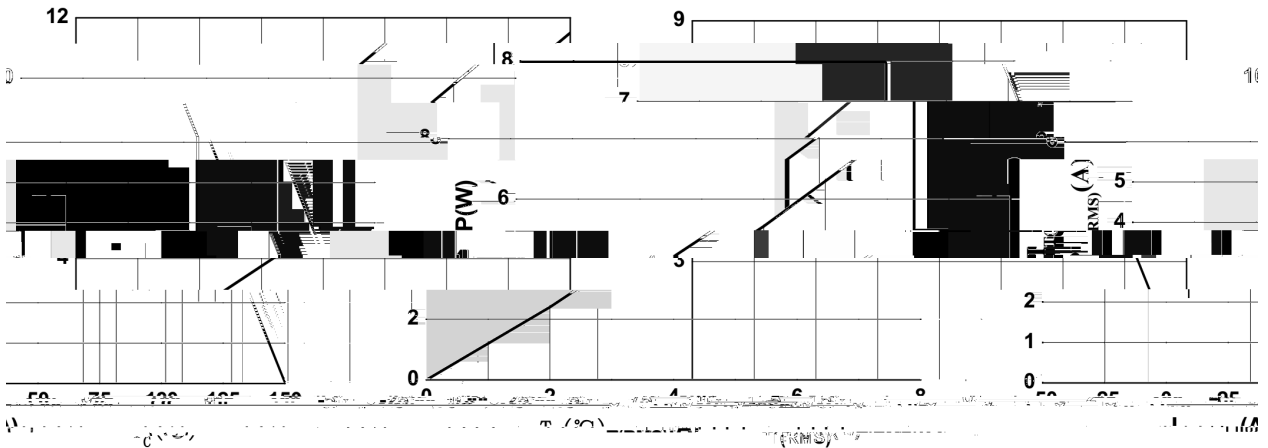


FIG 1: Maximum power dissipation versus RMS on-state current

FIG 2: RMS on-state current versus case temperature

FIG 3: Surge peak on-state current versus number of cycles

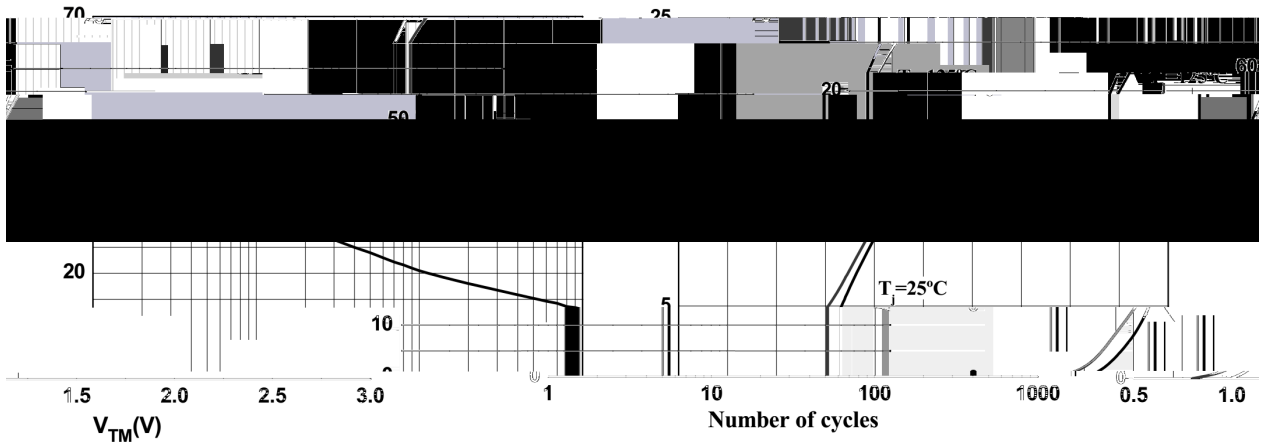


FIG 3: Surge peak on-state current versus number of cycles

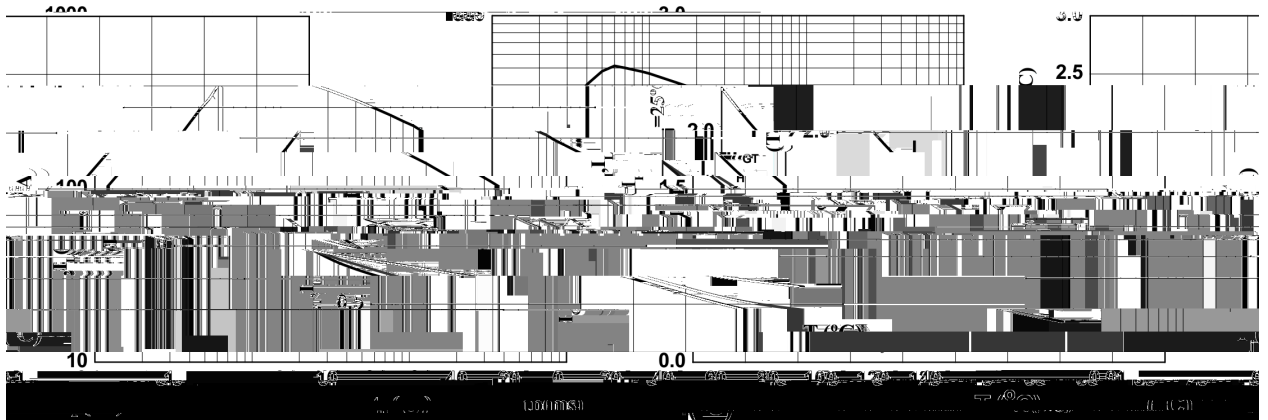


FIG 4: Relative variations of gate trigger

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

FIG 6: Non-repetitive surge peak on-state current

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/ Marking Instructions

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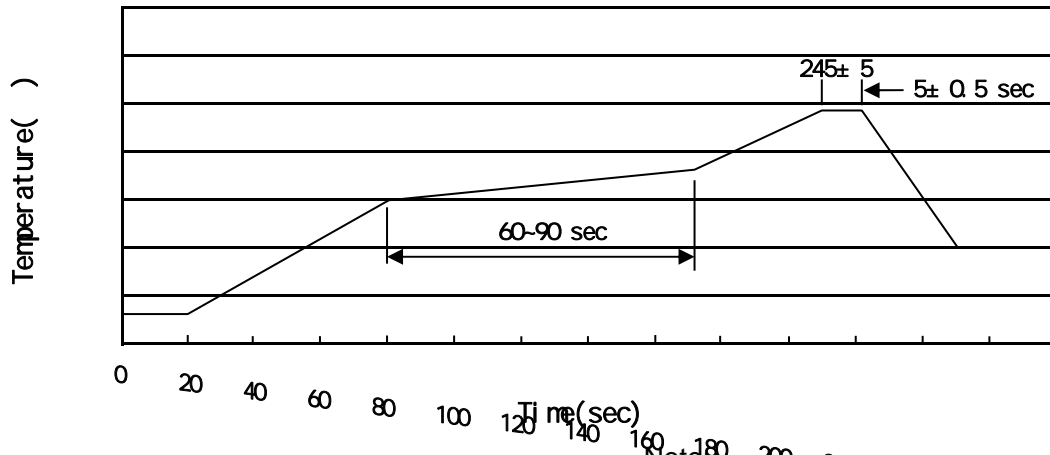
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Note:

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



- Note: 180 200 220 240 260 280
- 150 180 60 90sec; 1.Preheating:150~180 , Time:60~90sec.
 - 245±5 5±0.5sec; 2.Peak Temp.:245±5 , Duration:5±0.5sec.
 - 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

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension	Dimension (unit mm ³)	
TO-252	2,500	2	5,000	6	30,000	13 x16	360x360x50	380x335x366

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
TO-251/252	75	48	3,600	5	18,000	526x20.5x5.25	555x164x50	575x290x180

/ Notices