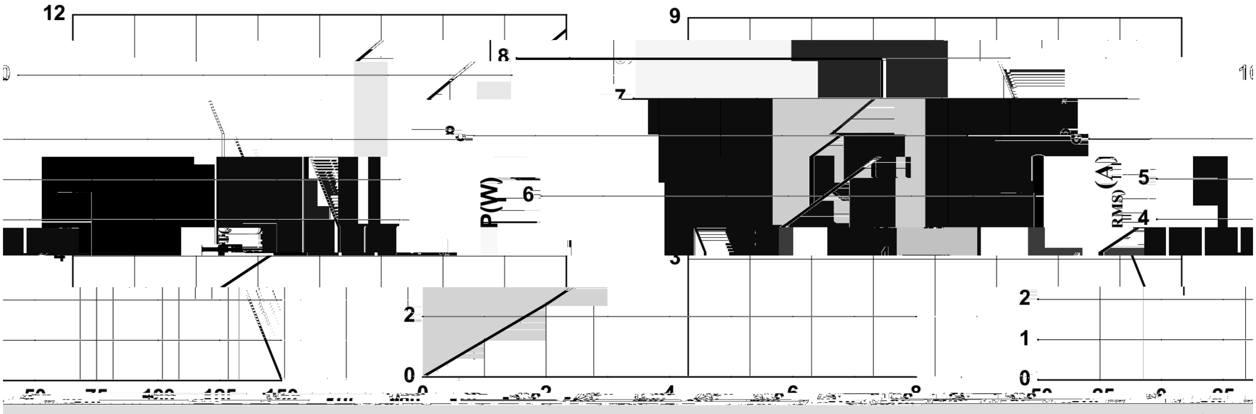
Rev.A Sep.-2024

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°C)	$I_{TSM(t=20ms)}$	65	A
I^2t value for fusing(T_j=25)	$I^2t_{(tp=10ms)}$	21	A^2s
Critical rate of rise of on-state current (I_G =2I_{GT}, f=120Hz T_j=150)	dI/dt I-II-III	80	A/εs
	dI/dt IV	40	
Peak gate current(t_p =20εs 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	



current versus case temperature

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

FIG.2: RMS on-state

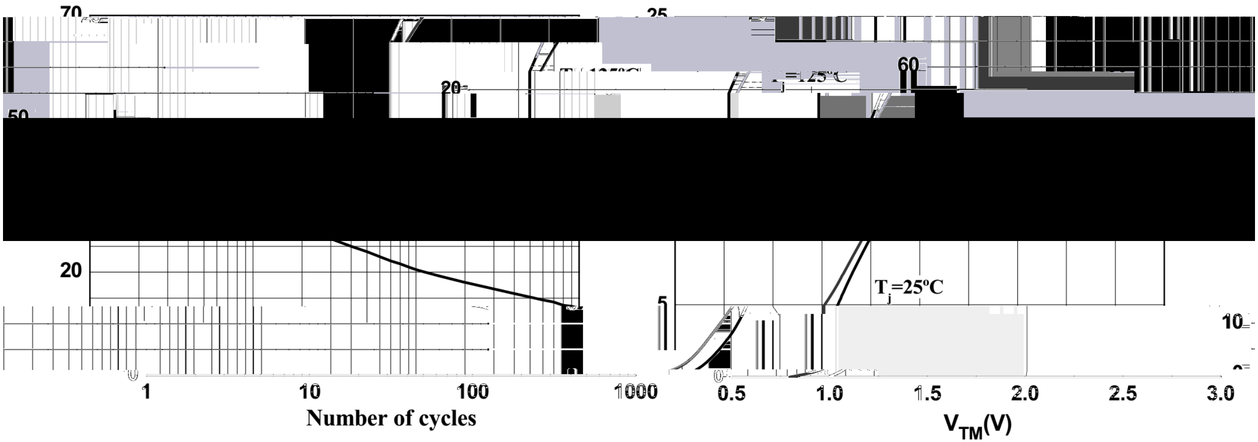


FIG.3: Surge peak on-state current versus

itive surge peak on-state current

FIG.6: Relative variations of gate trigger

FIG.5: Non-repet

BR

BT0808

E I_{GT}

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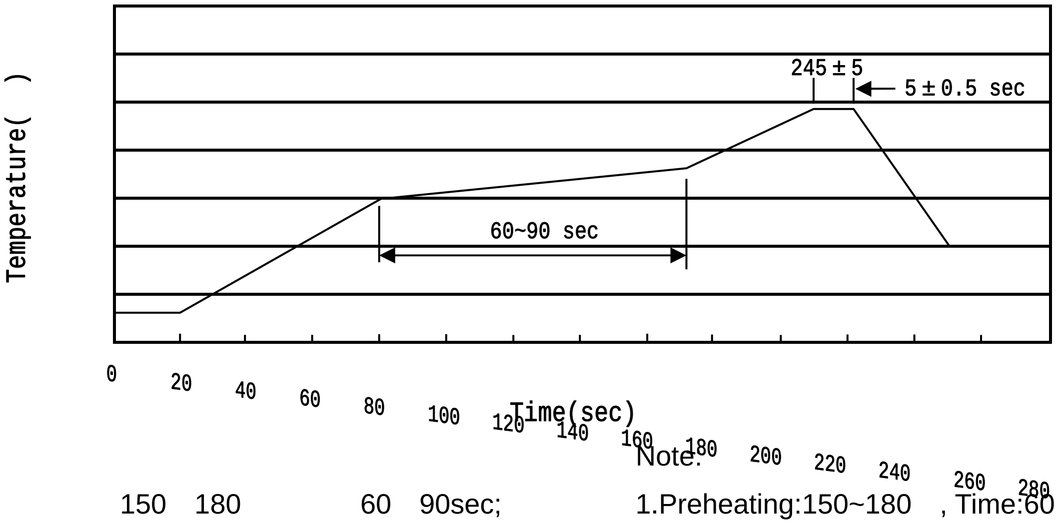
Note:

Temperature Profile for IR Reflow Soldering(Pb-Free)



1 150 180 60 90sec;
2 245±5 5±0.5sec;
3 2 10 /sec.

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

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ 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
TO-252	2,500	2	5,000	6	30,000	13 ×16	360×360×50	380×335×366

/ TUBE

Package Type	Units					Dimension (unit mm^3)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180