

BRBT0106DKA

Rev.A Apr.-2024

/ Descriptions

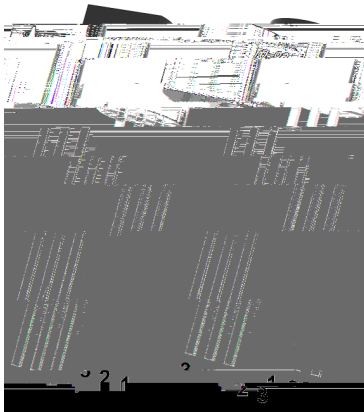
TO-92

Triac in a TO-92 Plastic Package.

/ Features

Low power gate trigger circuits.

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



PIN1 Main Terminal 2

PIN 2 Gate

PIN 3 Main Terminal 1

/ Marking

See Marking Instructions.

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Parameter	Symbol	Rating	Unit
Repetitive peak off-state/reverse voltages($T_j=25^\circ\text{C}$)	$V_{\text{DRM}}/V_{\text{RRM}}$	600	V
RMS on-state current($T_C=110^\circ\text{C}$)	$I_{\text{T(RMS)}}$	1	A
Non repetitive surge peak on-state current(full cycle, $T_j=25^\circ\text{C}$)	$I_{\text{TSM}(t=20\text{ms})}$	16	A
Critical rate of rise of on-state current ($I_G=2I_{\text{GT}}$, $f=100\text{Hz}$ $T_j=125^\circ\text{C}$)	dI/dt I-II-III	50	A/ μs
	dI/dt IV	30	
Peak gate current($t_p=20\mu\text{s}$ $T_j=125^\circ\text{C}$)	I_{GM}	2.0	A
Average gate power dissipation($T_j=125^\circ\text{C}$)	$P_{\text{G(AV)}}$	0.5	W
Operating junction temperature range	T_j	-40 125	
Storage junction temperature range	T_{stg}	-40 150	
Junction to ambient(AC)	$R_{\text{th}(j-a)}$	150	/W
Junction to case for(AC)	$R_{\text{th}(j-c)}$	60	

Symbol	Test Conditions	Quadrant	Value	Unit
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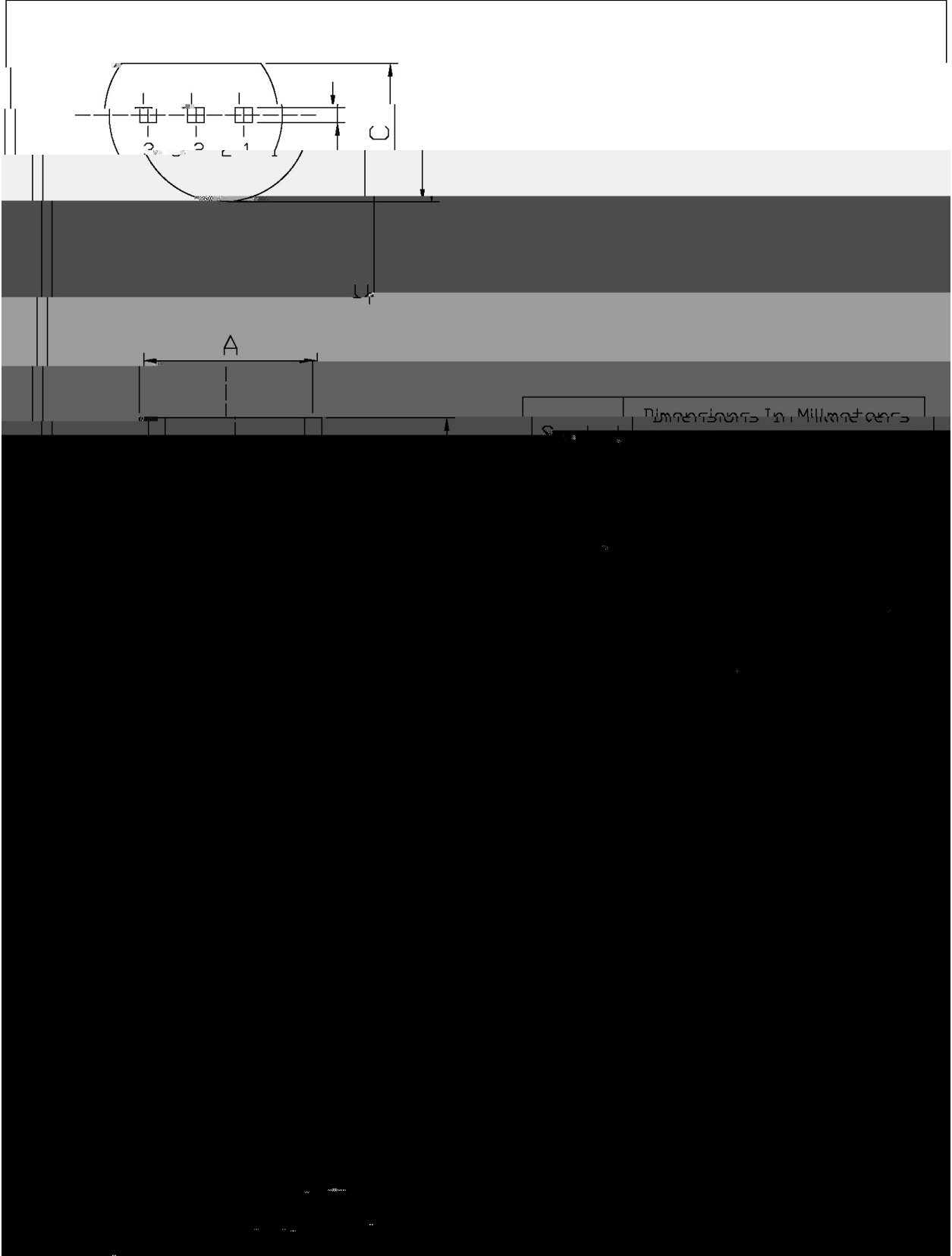
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DATA SHEET

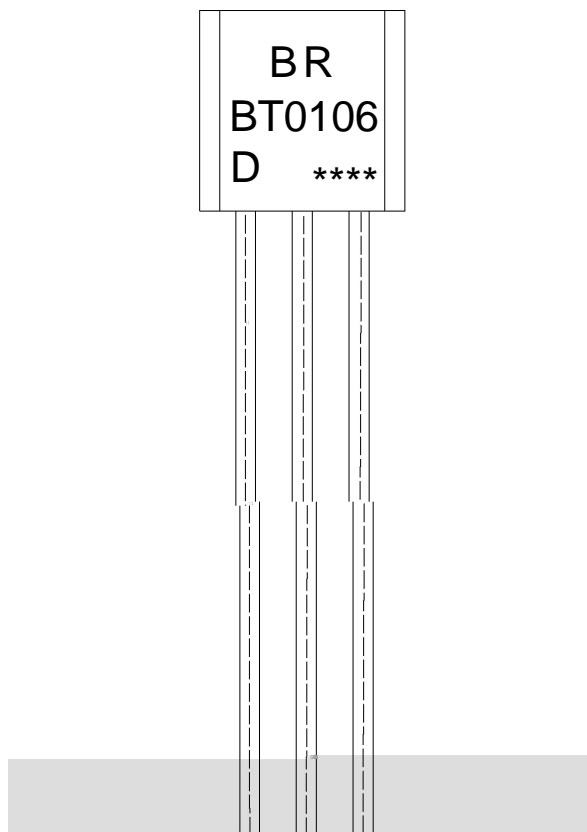
/ Package Dimensions

TO-92

Unit: mm



/ Marking Instructions



BR

BT0106

D: I_{GT}

Note:

BR: Company Code

BT0106: Product Type Code

D: I_{GT} Level Code

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

() / Temperature Profile for Dip Soldering(Pb-Free)

- | | | | | | | |
|---|-------|-----|-----------|--|-------|--|
| | | | | | | |
| 1 | 25 | 150 | 60 | 90sec; | Note: | |
| 2 | 255±5 | | 5±0.5sec; | 1.Preheating:25~150 , Time:60~90sec. | | |
| 3 | | 2 | 10 /sec. | 2.Peak Temp.:255±5 , Duration:5± 0.5sec. | | |
| | | | | 3. Cooling Speed: 2~10 /sec. | | |

/ Resistance to Soldering Heat Test Conditions

270±5 10± 1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension (unit mm3)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195

/ AMMO

Package Type	Units					Dimension (unit mm3)		
	Units/tape /	Tape/Inner Box /	Rows/Inner Boxes/Outer Boxes/Outer Box - /	Units/Outer Boxes/Outer Boxes -	Units/Outer Boxes -	100	220	220