BRBS08065RA

Rev.A Apr.-2024

DATA SHEET

/ Descriptions

WR0553 ṂṂŁ ɒ ᵇ ˡ í

Thyristor in a TO-220 Plastic Package.

/ Features

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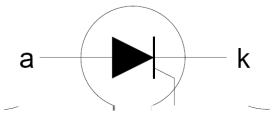
Glass passivated thyristors in a plastic envelope.

/ Applications

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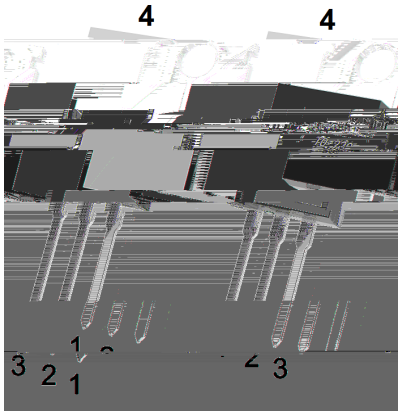
Use in applications requiring high bidirectional blocking voltage capability and high thermal cycling performance.Typical applications include motor control industrial and domestic lighting, heating and static switching.

/ Equivalent Circuit



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/ Pinning



PIN1 χ Cathode PIN 2,4 χ Anode PIN 3 χ Gate

/ Marking

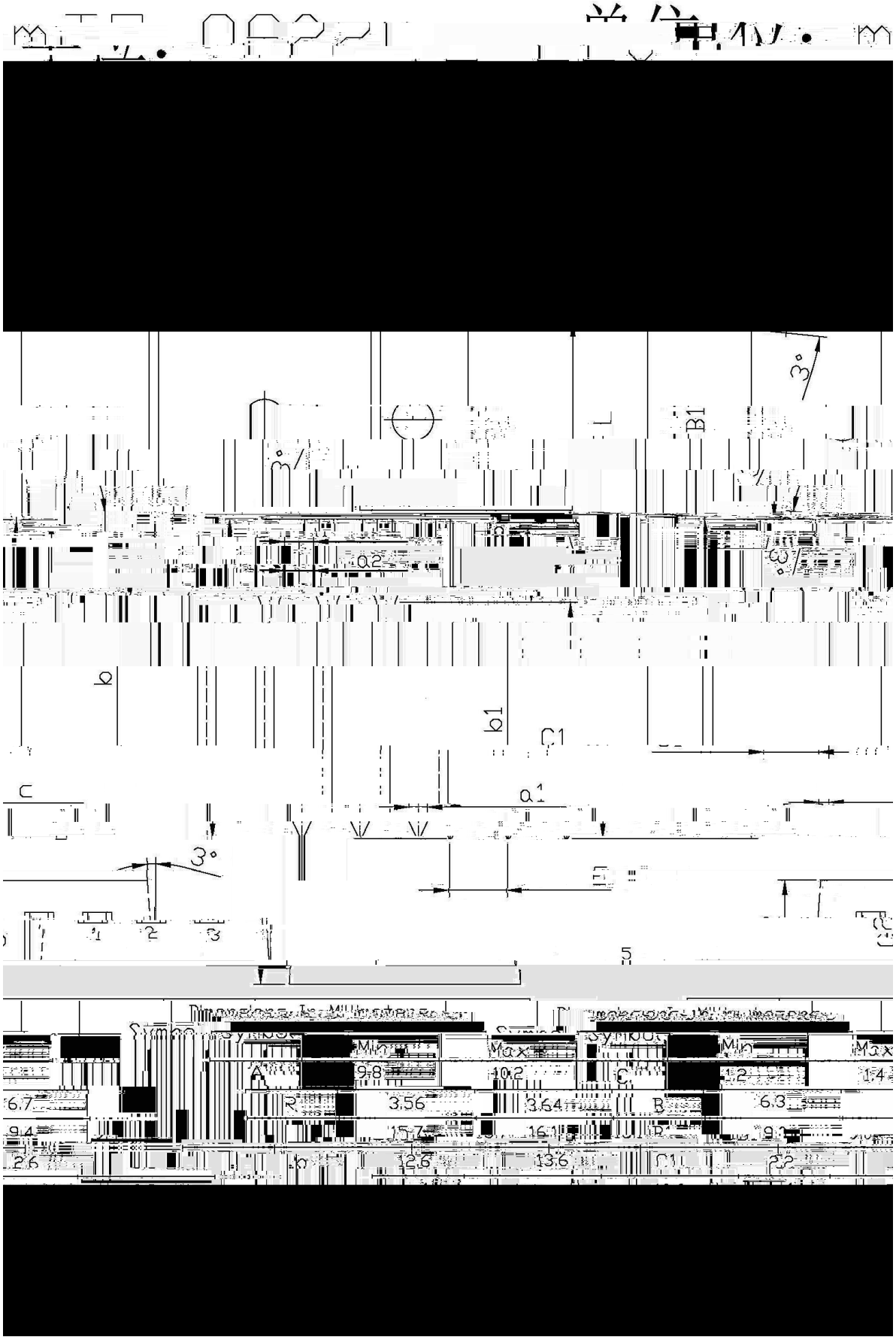
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See Marking Instructions.

v ¨Q Parameter	¬ N Symbol	¨Q Ö Rating	D Ð Unit
Repetitive peak off-state/reverse voltages(T_j=25 ł)	V_{DRM}/V_{RRM}	650	V
Average on-state current (T_C 105)	$I_{T(AV)}$	8	A
RMS on-state current(T_C=105 ł)	$I_{T(RMS)}$	12	A
Non repetitive surge peak on-state current (tp=10ms, Tj=25)	I_{TSM}	120	A
Non repetitive surge peak on-state current (tp=8.3ms, Tj=25)		132	
Peak gate current(t_p =20 s T_j=125 ł)	I_{GM}	2.0	A
Average gate power dissipation(T_j=125 ł)	$P_{G(AV)}$	0.5	W
Operating junction temperature range	T_j	-40 125	ł
Storage junction temperature range	T_{stg}	-40 150	ł
Junction to ambient(AC)	$R_{th(j-a)}$	60	ł /W
Junction to case for(AC)	$R_{th(j-c)}$	1.3	

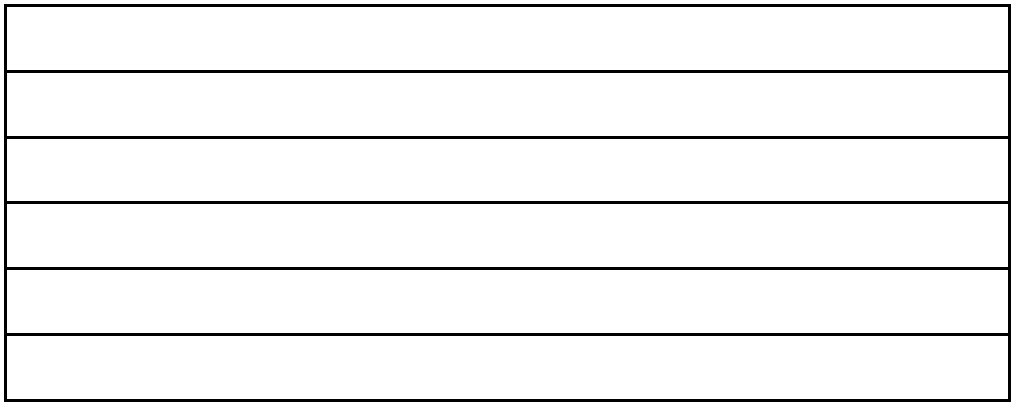
¬ N Symbol	Ð ¡ Ì Ţ Test Conditions	¨Q Ö

/ Package Dimensions



BRBS08065RA

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



ب ˝ χ

1 Ĺ ♬ □ ỷ 25 Ḱ 150 ɬ ı ˋH ڑ 60 Ḱ 90sec;

2 Š Ë □ ỷ 255 ° 5 ɬ ı ˋH ڑ ˋY ∧ ㎛ 5 ° 0.5sec;

3 ì ˙ ٧ ˛ ↄ ෯ ỷ ㎛ 2 Ḱ 10 ɬ /sec.

Note:

1.Preheating:25~150 ɬ , Time:60~90sec.

2.Peak Temp.:255 ° 5 ɬ , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ɬ /sec.

/ Resistance to Soldering Heat Test Conditions

□ ỷ χ 270 ° 5 ɬ ˋH ڑ χ 10 ° 1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

ˇΩ ţ ץ Ь / 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-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

˛ ٦ ץ Ь / TUBE

Package Type

Dimen291n