

BRBS08065RA

Rev.A Apr.-2024

/ Descriptions

KF \$))'

Thyristor in a TO-220 Plastic Package.

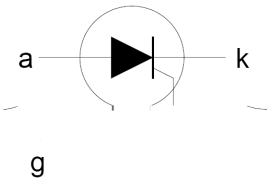
/ Features

Glass passivated thyristors in a plastic envelope.

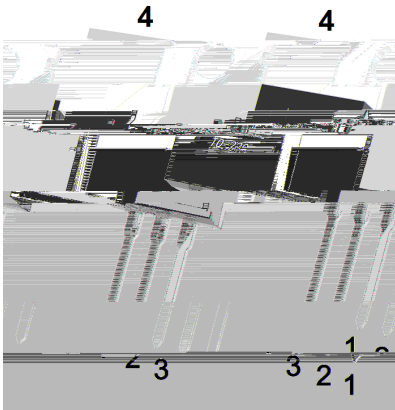
/ Applications

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



/ Pinning



PIN1 Cathode PIN 2,4 Anode PIN 3 Gate

/ Marking

See Marking Instructions.

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

Symbol

Test Conditions

BRBS08065RA

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

Note:

- | | | | |
|---|--------|------------|---|
| 1 | 25 150 | 60 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255..5 | 5..0.5sec; | 2.Peak Temp.:255..5 , Duration:5..0.5sec. |
| 3 | 2 10 | /sec. | 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 mm ³)		
	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	135x190	237x172x102	560x245x195

/ TUBE

Package Type