

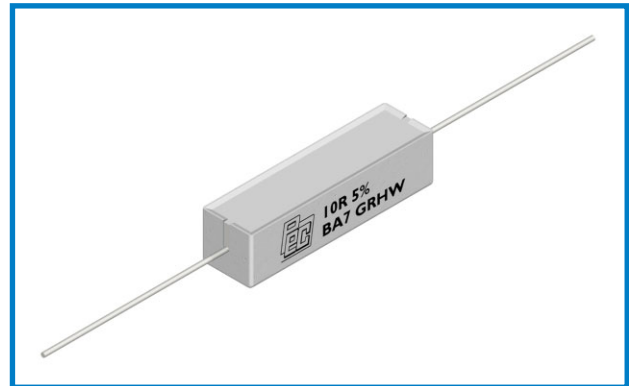


### Boat Ceramic Cased, Axial

### Series PBA

#### Key Features

- High Overload Capability
- High Moisture Resistance
- Non-Flammable Construction
- Low Surface Temperature
- 2 to 20W Power Rating
- All Welded Construction for High Specification Parts



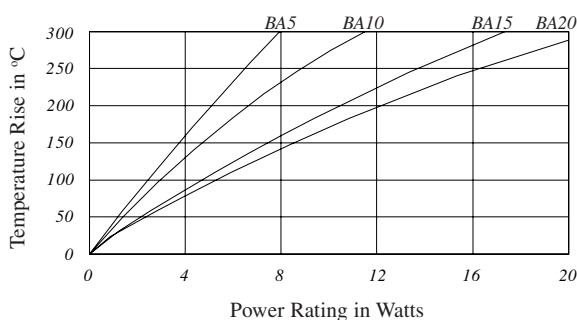
#### Electrical Specifications and Environmental Characteristics

Type	Power @25°C Watts	Ohmic Range Ohms		Additional Specifications	
		Min	Max		
BA2	2	0R10	2K7	TCR - Low Values	< 450 ppm/°C
BA3	3	0R10	2K7	TCR - Other Values	Std. < +150 ppm/°C, On Request 20 ppm/°C
BA5	5	0R10	2K7	Derating	From 70°C to 275°C
BA7	7	0R10	10K	Climatic Catg.	55 / 200 / 56
BA10	10	0R22	10K	Ambient Temp.	-55°C to 200°C
BA15	15	0R22	10K	Load Life	ΔR < 5%
BA20	20	0R33	15K	Solvent Resistance	As Per IEC 115-1, Clause 4.30, Test XA of IEC 68-2-45

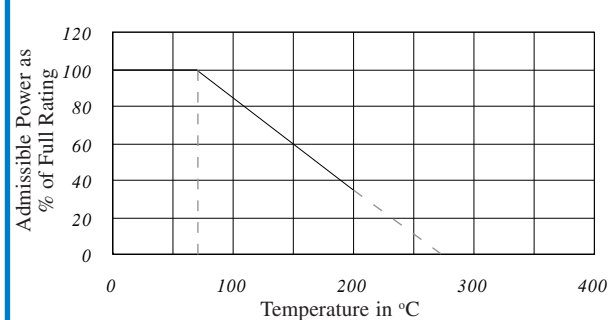
#### Performance Characteristics

Test Methods	Test Conditions	Test Limits
Short Term Overload	5 x Rated Power for 5 Seconds, IEC 115-1, Clause 4.13	ΔR < 2% + 0R05
Endurance at Rated Wattage	Full Rated Power for 1000hrs (1.5hrs ON, 0.5hrs OFF)	ΔR < 5% + 0R05
Terminal Strength	Pull Strength of 50N for 10 seconds, IEC 115-1, Clause 4.16, Test U <sub>a1</sub>	ΔR < 1% + 0R05
Insulation Resistance	As Per IEC 115-1, Clause 2.2.17, at 500V DC	500MΩ
Long Term Damp Heat	90-95% RH @ 40°C Ambient Temperature for 56 days, IEC 115-1, Clause 4.24	ΔR < 3% + 0R05
Resistance to Soldering Heat	10 Seconds Dip in Solder Bath at 260°C, IEC 115-1, Clause 4.18	ΔR < 1% + 0R05
Solderability	MIL Std. 202F, Test 208	95% Coverage

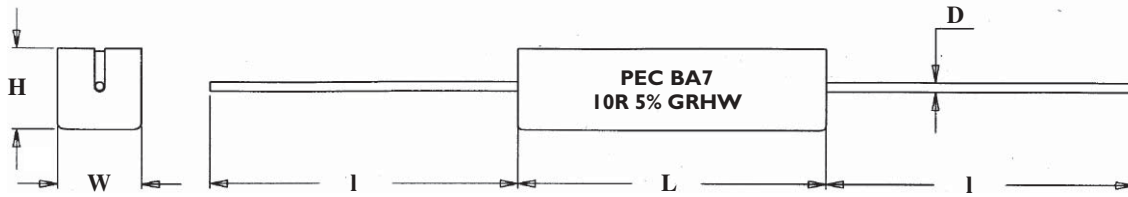
#### Temperature Rise Graphs



#### Derating Curve<sup>2</sup>



## Dimensions



Do not Scale Drawings.  
All dimensional tolerances in mm.

## Dimensions (mm)

Type	L	W	H	D	L
	± 1.5	± 1.0	± 1.0	± 0.05	Nom
BA2	18	7.0	7.0	0.80	35.0
BA3	22	8.0	8.0	0.80	35.0
BA5	22	9.5	9.5	0.80	35.0
BA7	35	9.5	9.5	0.80	35.0
BA10	48	9.5	9.5	0.80	35.0
BA15	48	12.5	12.5	0.80	35.0
BA20	60	12.5	12.5	0.80	35.0

## Dimensions (Inches)

Type	L	W	H	D	L
	± 0.059	± 0.039	± 0.039	± 0.002	Nom
BA2	0.708	0.275	0.275	0.0315	1.378
BA3	0.866	0.315	0.315	0.0315	1.378
BA5	0.866	0.374	0.374	0.0315	1.378
BA7	1.378	0.374	0.374	0.0315	1.378
BA10	1.890	0.374	0.374	0.0315	1.378
BA15	1.890	0.492	0.492	0.0315	1.378
BA20	2.362	0.492	0.492	0.0315	1.378

## To Order - Please Specify

PEC Type.	Ohmic Value	Tolerance	Packing Style	Release Condition	Special Requirements
BA7	0.1 Ohm » 0R1 / R10 1 Ohm » 1R0 1 KOhm » 1K0 10.7 KOhm » 10K7	0.5% » D 1% » F 2% » G 5% » J 10% » K	Bulk » B	Commercial » X	Standard » S High Surge » P Others » M Please Specify

A Sample Part No.: **BA7 10R JBXS**

## Notes

- On request we undertake tests for Batch Acceptance to a specified Reference Standard.
- The Derating Curve specifies the maximum allowable Power at a particular ambient temperature while ensuring that the maximum surface temperature remains within the designed limit.
- When the Resistor is subjected to a Pulse Load, please ensure that the *average* Power dissipated remains below the rated Power specified.
- Resistor performance with Pulse Loads will have to be application tested. Please utilise our Pulse Application Questionnaire for selecting a suitable type or for requesting any design-in assistance from us.

### International

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R. Ramaswamy, Electronic Agencies  
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### Factory Coordination

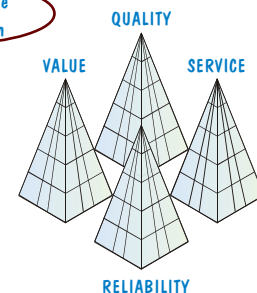
J.R. Logani, Delhi  
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Better People  
to Work with



Thoughtful engineering and production by a well trained work-force, backed by strong design and development skills, enable us to maintain a level of manufacture and service recognised internationally.  
**At PEC we offer well-tuned customised support.**