

Model BHV



High Voltage / High Value
Thick Film SIP
Epoxy / Polymer Coated Resistors
Precision Dividers

Applications

- Photomultiplier power supplies
- Voltage sense in high voltage power supplies
- High Voltage bleeder resistors
- Deflection circuitry in display systems and monitors

Electrical

Resistance Range*		1 Giga Ohm Maximum
Tolerance	Standard:	± 5%, ± 10%
	Custom:	± 1%, ± 2%
Temperature Coefficient of Resistance		± 150 ppm/°C Maximum
Voltage Coefficient		2 ppm/V Maximum

* Consult factory for higher values

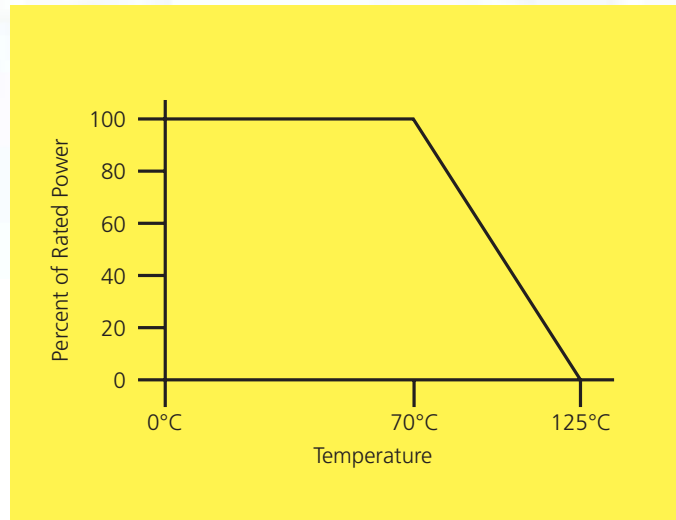
Mechanical

Cover Coat	Style RS, PW & PF:	Polymer Cover Coat
	Styles RF & RW:	Epoxy
Substrate		Alumina
Resistor		Cermet

Power (Watts) Dissipation at 70°C

Model	Power (Max)
BHV 10	1.0
BHV 15	1.5
BHV 20	2.0
BHV 30	3.0

Power Derating Curve



Environmental (Per MIL-PRF-83401)

Operating Temperature Range	-55°C to +125°C
Thermal Shock	ΔR: ± 0.50%
Terminal Strength	ΔR: ± 0.25%
Moisture Resistance	ΔR: ± 0.50%
Mechanical Shock	ΔR: ± 0.25%
Vibration	ΔR: ± 0.25%
Low Temperature Storage	ΔR: ± 0.25%
High Temperature Exposure	ΔR: ± 0.25%
Load Life, 1000 Hours	ΔR: ± 1.00%
Resistance to Solder Heat	ΔR: ± 0.25%
Dielectric Withstanding Voltage	5000 V Minimum
Marking Permanency	MIL-STD-202, Method 215
Lead Solderability	MIL-STD-202, Method 208
Flammability	UL 94V-0 Rated
Storage Temperature Range	-55°C to +125°C

Ordering Information

BHV 10 RS D XXX J J

Model BHV
Voltage Rating kV 10
Style RS
D = Dividers Only
Absolute Tolerance Code J
Ratio Tolerance Code (Dividers only) J

RS = Polymer coated substrate with solder pads
 RW = Epoxy coated package with round wire
 RF = Epoxy coated package with flat leads
 PF = Polymer coated substrate with flat leads
 PW = Polymer coated substrate with round wire

Absolute Tolerance Code
 F = ± 1%
 G = ± 2%
 J = ± 5%
 K = ± 10%

Resistance Code
 First 2 digits are significant. Last digit denotes number of trailing zeros.

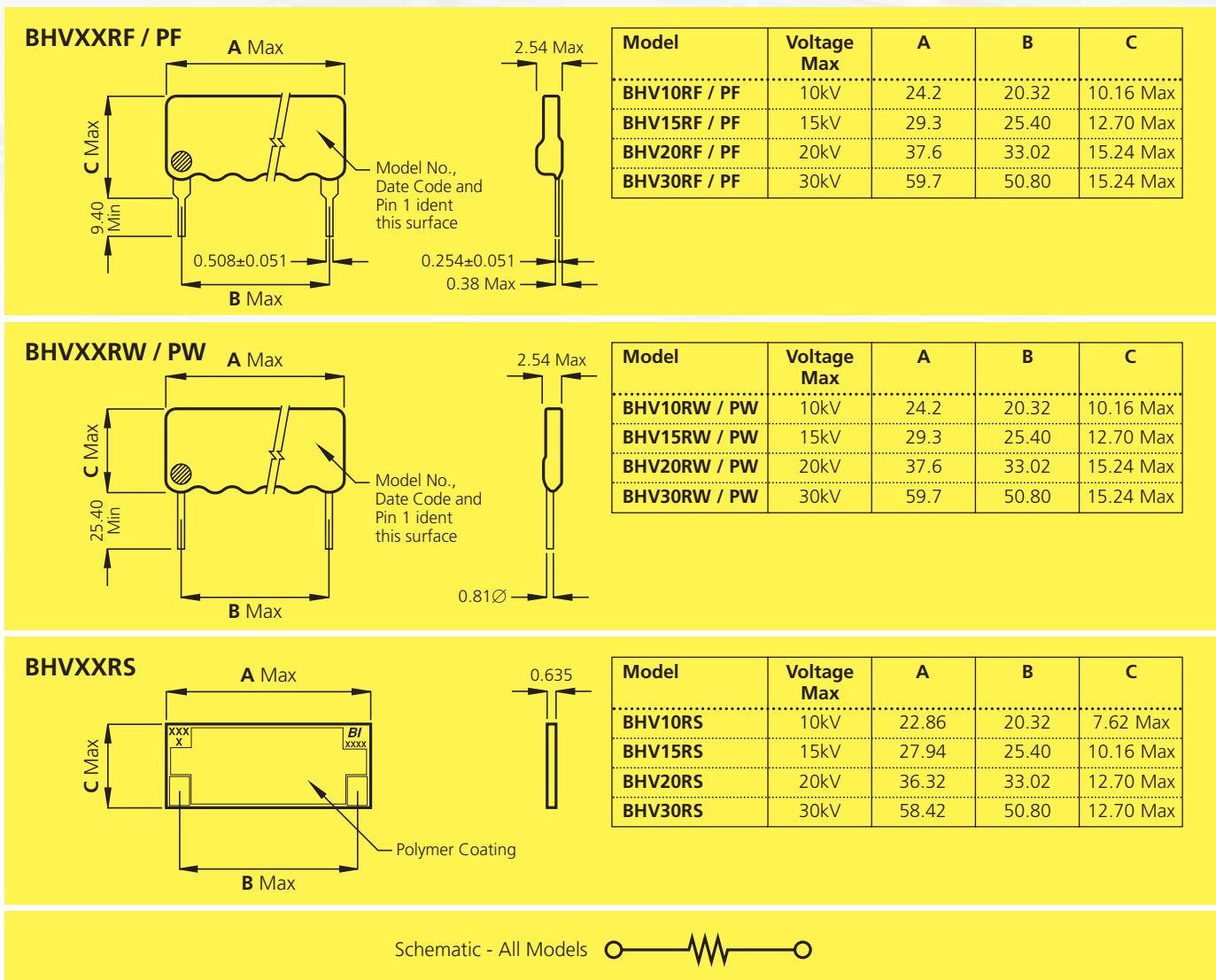
For Dividers Only
 XXX / YYY
 R1+R2 R2

Packaging

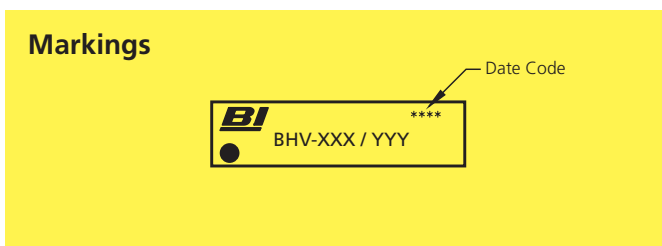
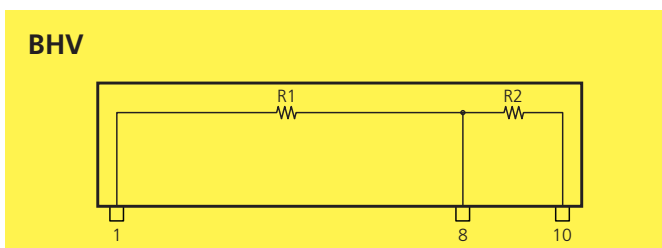
Standard: Box Capacity 100 units

- Specifications subject to change without notice.
- Contact factory for Voltage dividers and application specific devices.

Outline Dimensions (mm)



BHV - Precision Divider

**Specification Notes**

- 1) $R1+R2 = 1G \text{ Ohm} \pm 5\%$ (Max)
- 2) Typical Ratio - $(R1 + R2) / R2 = 1000, 500, 100$
- 3) Ratio Tolerance = 10%, 5%, 2%, 1%
- 4) TCR = 100ppm/°C Max (+5°C to +50°C)
- 5) Ratio TCR = 50ppm/°C Max
- 6) VCR = 2ppm/V Max
- 7) Max Operating Voltage = 2kV Max (over 1G Ohm)
- 8) Pin Pitch 1 to 8 is 0.7" Nominal
- 9) Pin Pitch 8 to 10 is 0.2" Nominal
- 10) Pin Length = 0.178" ± 0.018 "
- 11) Max Seated Height = 0.380", Max Length = 1.000", Max Thickness = 0.1"

BI Technologies - SMT

Company Profile

BI Technologies, SMT Division is a World Class manufacturer of thick film Passive Components. The company was established in 1958 in Glenrothes, Scotland. BI Technologies have earned a great reputation as a high quality, high volume, cost effective and responsive supplier of thick film passive components for telecommunications, computer, automotive, medical and industrial applications.



Product Range

- Packaged SIL, DIL and Surface Mount Resistor Networks
- Chip Resistor Arrays
- Chip Resistor - Capacitor Arrays
- Planar Power Resistors
- Surge Resistors
- Thick Film Substrates
- Custom Thick Film products
- High Voltage Resistors and Networks

BI Technologies - ECD

Company Profile

BI Technologies has been an innovator and leader in electronic components for more than 50 years manufacturing products for communication, computer, industrial and automotive applications.

BI Technologies serves a global customer base with manufacturing locations in the United States, Mexico, Scotland, Japan, China and Malaysia.



Product Range

- Trimming and Precision Potentiometers
- Position Sensors
- Chip Resistor Arrays
- Resistor Networks
- Integrated Passive Networks
- Inductors
- Transformers
- Turns Counting Dials
- Hybrid Microelectronics and Custom Integration Products

BI Technologies - MCD

Company Profile

BI Technologies, Magnetic Component Division, headquartered in Fullerton, California, with a manufacturing base in Kuantan, Malaysia, is a world leader in miniature surface mount high power inductors. The magnetic material and manufacturing expertise of various inductors, choke coils, transformers and assemblies has expanded the customer and market base into automotive, medical, computer, data communication and industrial in addition to other specialized magnetic assembly applications.



Product Range

- Transformers both surface mount and through hole
- Surface Mount high powered inductors
- Toroidal inductors (through hole and surface mount)
- High power specialty laminate transformers
- Data communication modules, filters, and transformers for ethernet and DSL
- Common mode filters and chokes
- Planar transformer solutions

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