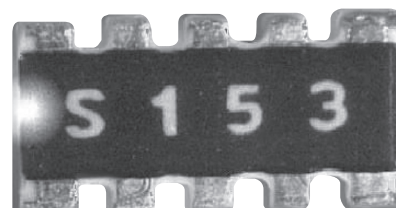


BCN Series

Features

- Sulphur resistant version available (Tested to ASTM-B809)
- AEC-Q200 (BCN10 and BCN164AB)
- Convex terminations
- Isolated and bussed versions



 All parts are Pb-free and comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

Summary of Types

Type	Part Number Start	Width (mm)	Resistor Elements	Circuit	Package Size	Scalloped Convex	Square Convex
BCN10	BCN104AB	1.0	0402 x 4	Isolated	0804		
BCN164	BCN164A	1.6	0603 x 4				
	BCN164AB						
BCN168	BCN168SB		0603 x 8	Bussed	1206		
	BCN168RB						

Electrical Data

		BCN10	BCN164	BCN168
Resistor power rating @70°C	mW	63		32
Package power rating @70°C	mW	250		
Limiting element voltage	V	25	50	25
Maximum overload voltage	V	63	125	63
Resistance range	ohms	10R – 1M0		100R – 1M0
Resistance tolerance	%	1, 5	1, 2, 5	5
TCR	ppm/°C	±200		
Standard values		E24 (for 2% or 5% tolerance), E96 (for 1% tolerance)		
Ambient temperature range	°C	-55 to +155		

General Note

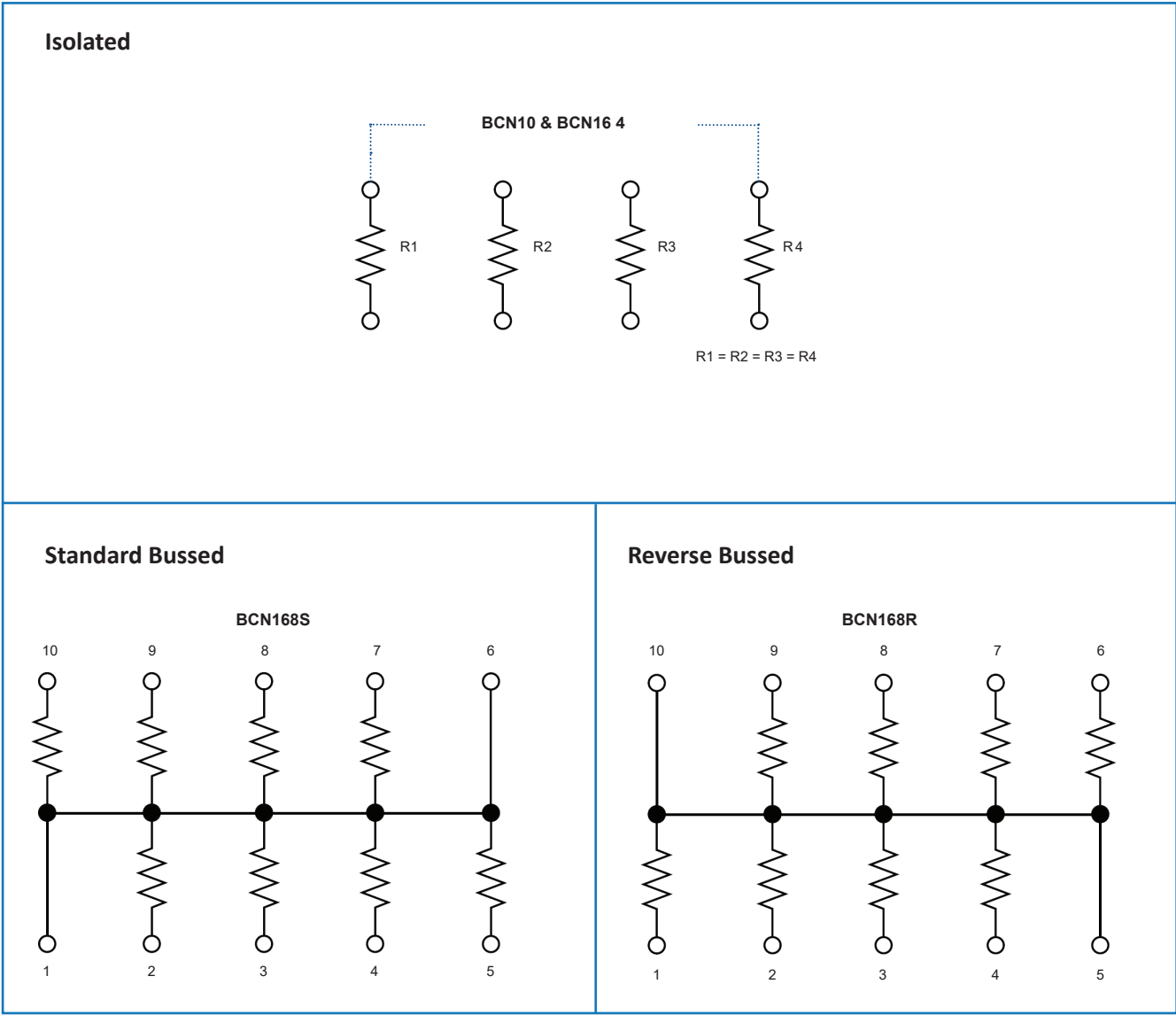
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BCN Series

Circuits



Environmental Data

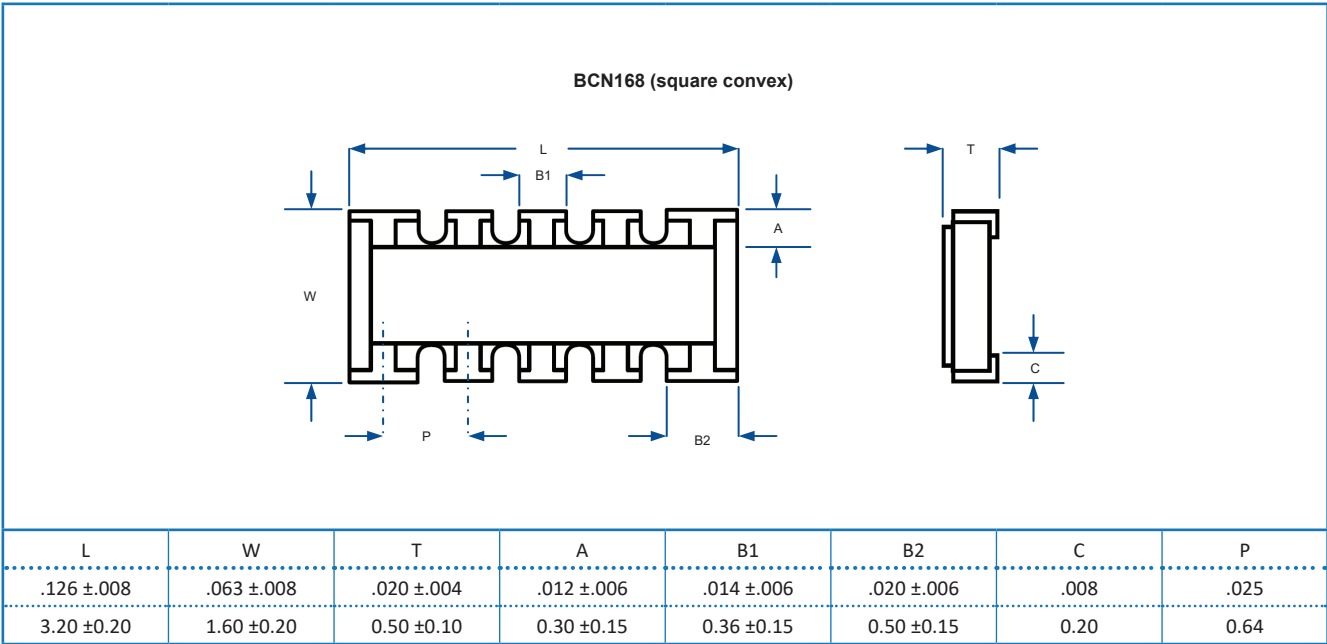
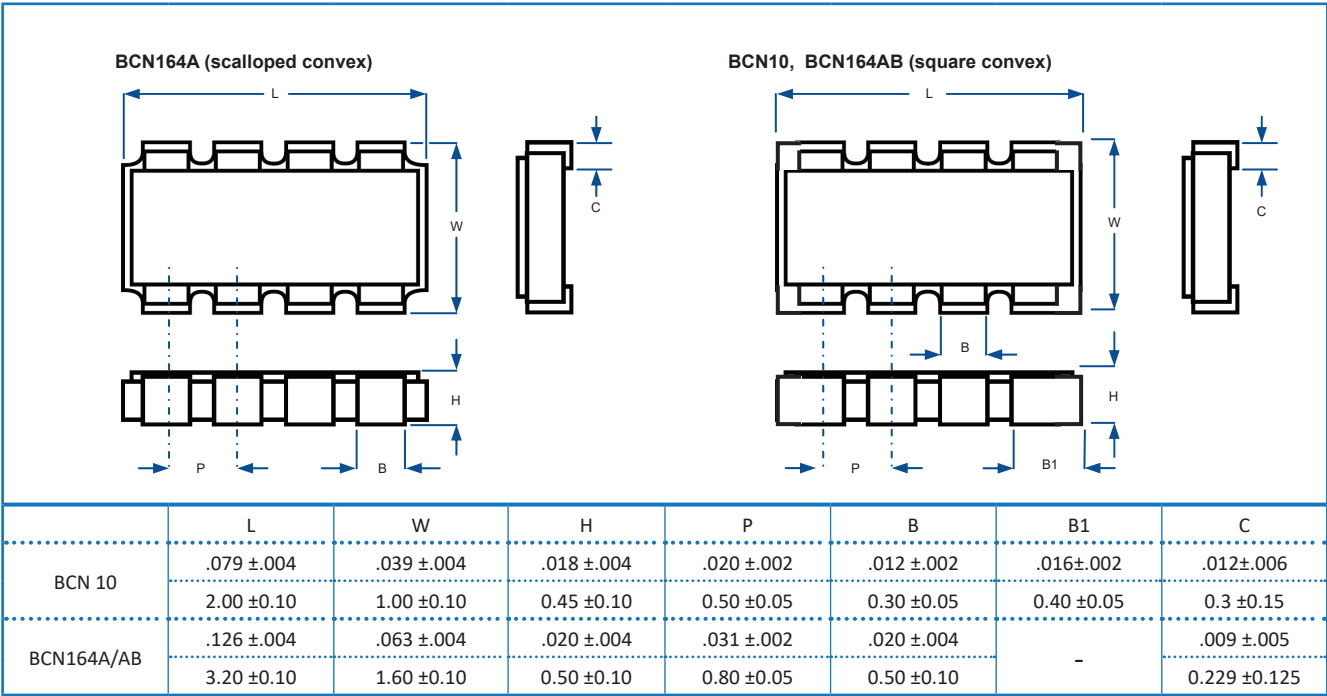
Test	Condition	$\Delta R\%$ (+0.1 Ω)
Load life	1000 hrs cyclic load @ 70°C	3
Short term overload	2.5 x rated voltage for 5s	2
High temperature operation	1000 hrs @ 155°C	3
Temperature cycling	5 cycles, -55 to +155°C	1
Moisture resistance	1000 hrs @ 40°C, 95% RH	3
Resistance to solder heat	260°C for 10s	1
Sulphur resistance ¹	1000 hrs @ 50°C, 92% RH, 3-5ppm H ₂ S	0.5

Note 1 – Anti-sulphur construction only

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BCN Series

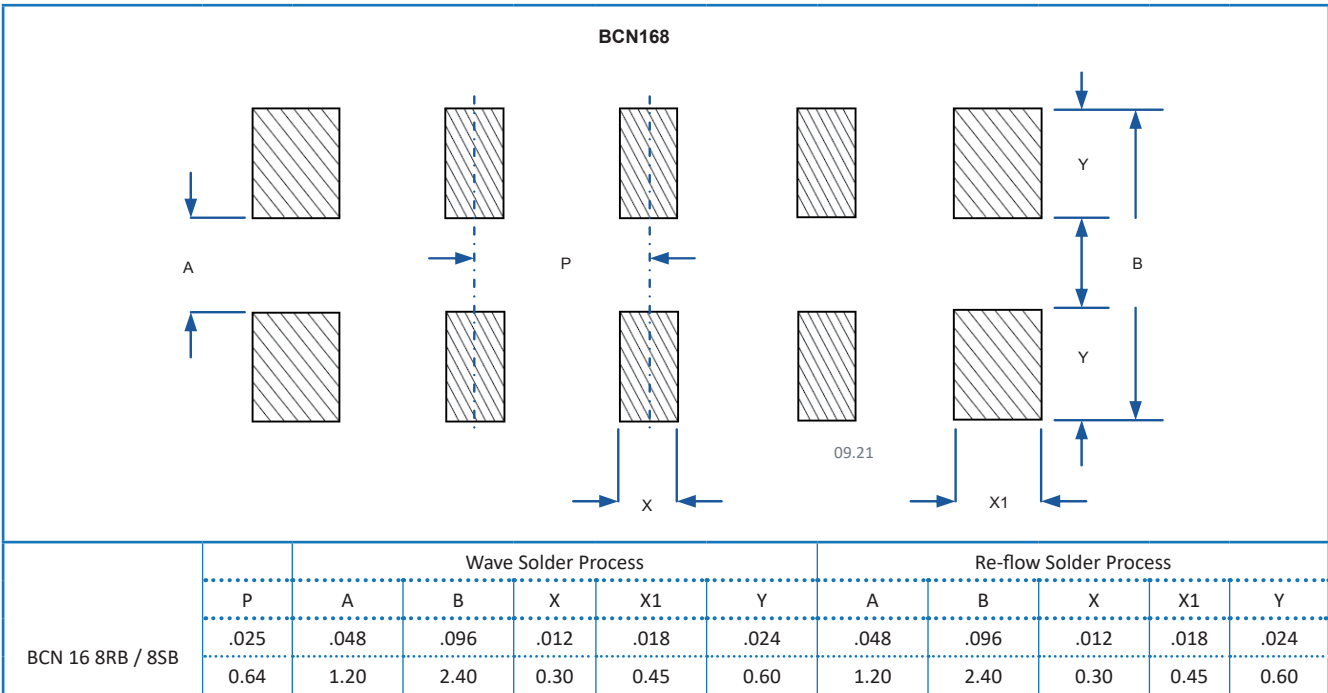
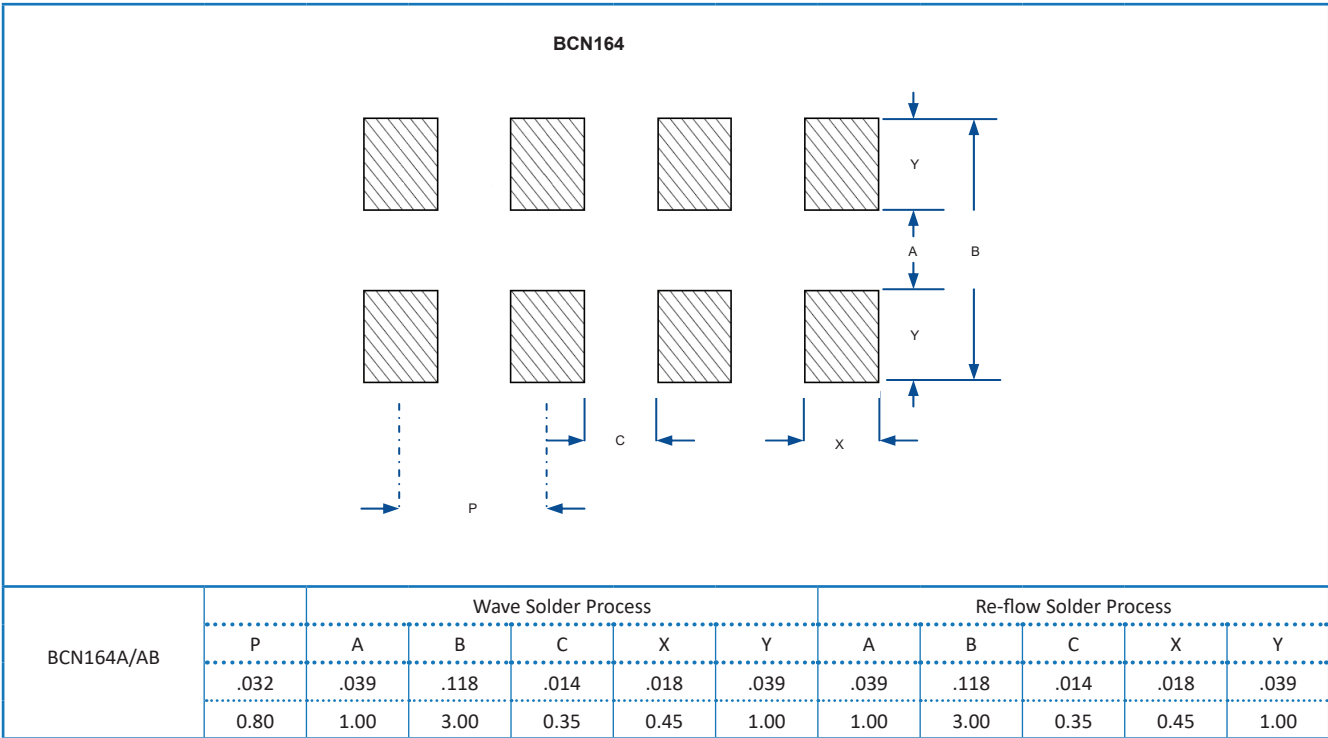
Physical Data (Inch /mm)



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BCN Series

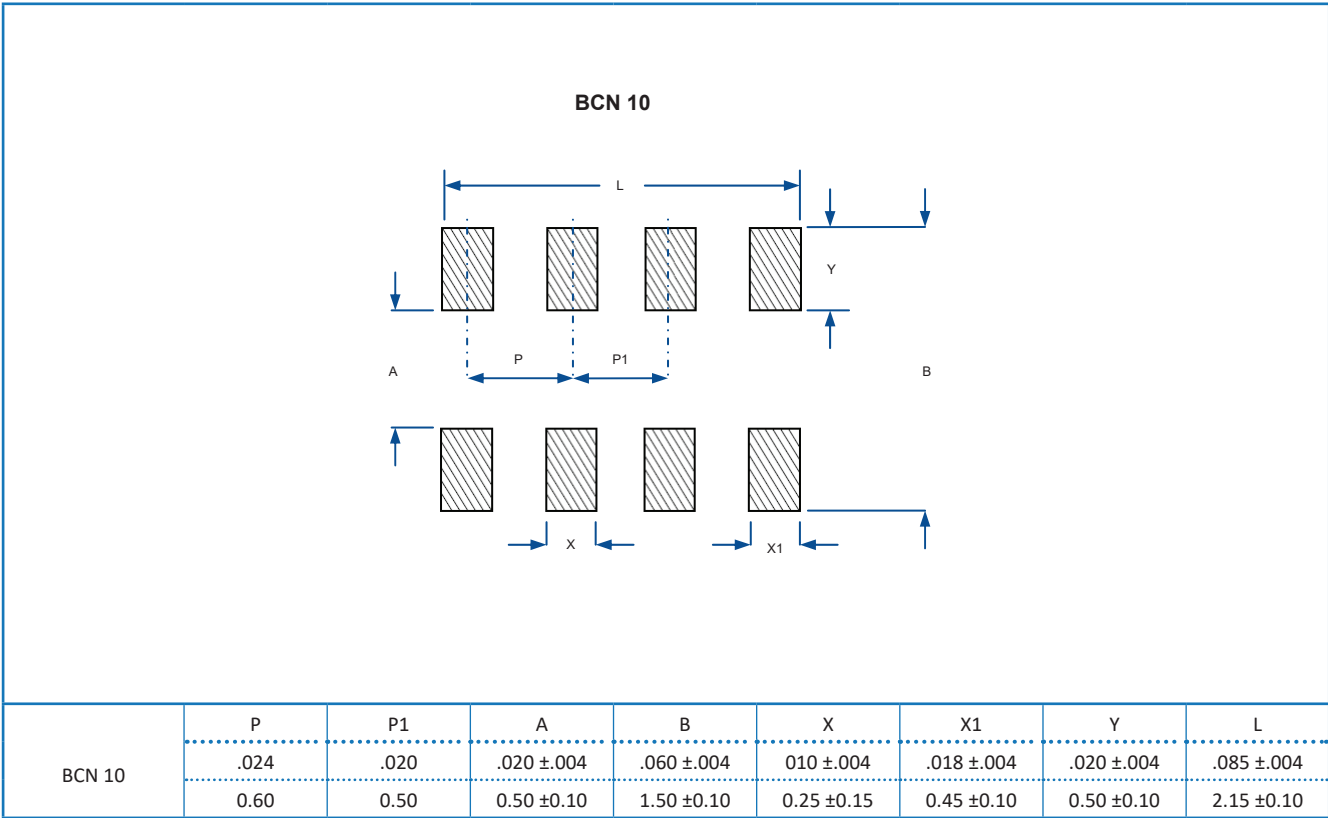
Solder pad layout (Inch / mm)



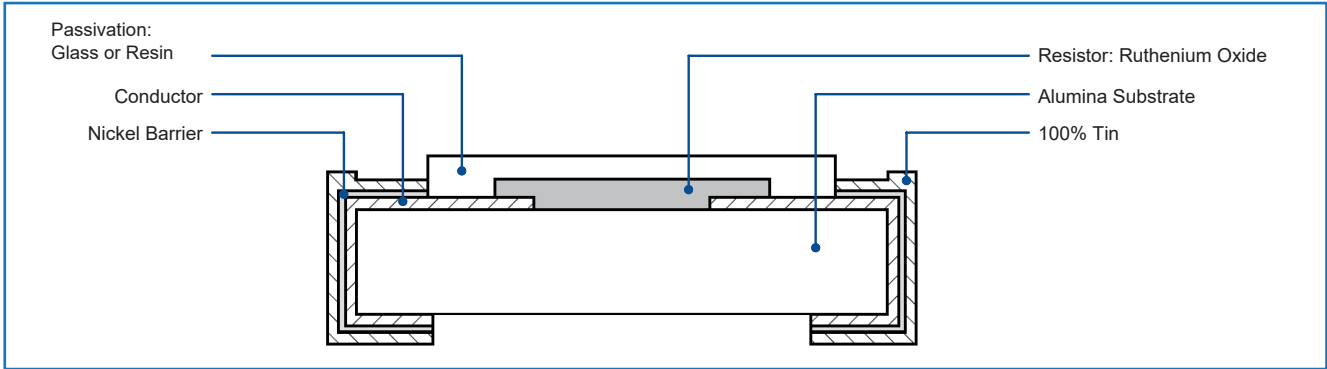
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BCN Series

Solder pad layout (Inch / mm)



Construction



Marking

BCN parts may be unmarked or marked with ohmic values. If marked, 2% and 5% tolerance parts are marked with three characters (e.g. 102). 1% tolerance parts may be marked with 3 or 4 characters (e.g. 102, 1001, 4991)

BCN Series

Ordering Procedure

Example: BCN164AB102J7S (BCN 1.6mm wide, 4 resistors, isolated circuit, square edge, convex terminations at 1 kilohm $\pm 5\%$, on a 7" reel, anti-sulphur construction, Pb-free).

B	C	N	1	6	4	A	B	1	0	2		J	7		S
1	2	3	4	5	6	7	8	9							

1 Series	2 Width	3 Number of Resistors	4 Circuit	5 Edge	6 Value	7 Tolerance	8 Packaging	9 Construction
BCN	10=1.0mm	4	A=Isolated	Blank=Scalloped	3 digits for E24 at 2% or 5%	F= $\pm 1\%$	7=7" reel (standard)	Blank=Standard
	16=1.6mm	8	S=Standard bussed	B=Square	4 digits for uniquely E96 and for all values at 1%	G= $\pm 2\%$	13=13" reel	S=Anti-sulphur
			R=Reverse bussed			J= $\pm 5\%$ (Blank for jumper)		
					JP=Jumper			

Valid Options (1 - 5)	Valid Options (6 & 9)	Packaging Quantity & Tape (8)
B C N 1 0 4 A B	JP=Jumper, S=Anti-sulphur (5% tolerance & 7" reel only)	7=10,000/reel, 13=40,000/reel, Paper tape
B C N 1 6 4 A	JP=Jumper, S=Anti-sulphur (1 or 2% tolerance & 7" reel only)	
B C N 1 6 4 A B	JP=Jumper, S=Anti-sulphur (1 or 5% tolerance only)	
B C N 1 6 8 S B		7=5000/reel, 13=20,000/reel, Paper tape
B C N 1 6 8 R B	S=Anti-sulphur (7" reel only)	

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