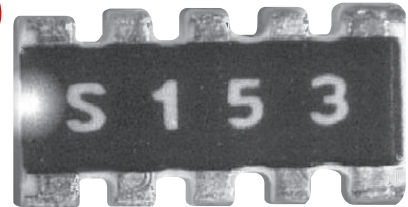


Thick Film Chip Arrays

BCN Series

OBSOLETE (BCN4D only)

- Sulphur resistant version available (Tested to ASTM-B809)
- AEC-Q200 (BCN10, BCN164AB and BCN4D)
- 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			1206	
	BCN164AB						
BCN168	BCN168SB	1.6	0603 x 8	Bussed	1206		
	BCN168RB						
BCN4D	BCN4D	3.1	1206 x 4	Isolated	2112		

Electrical Data

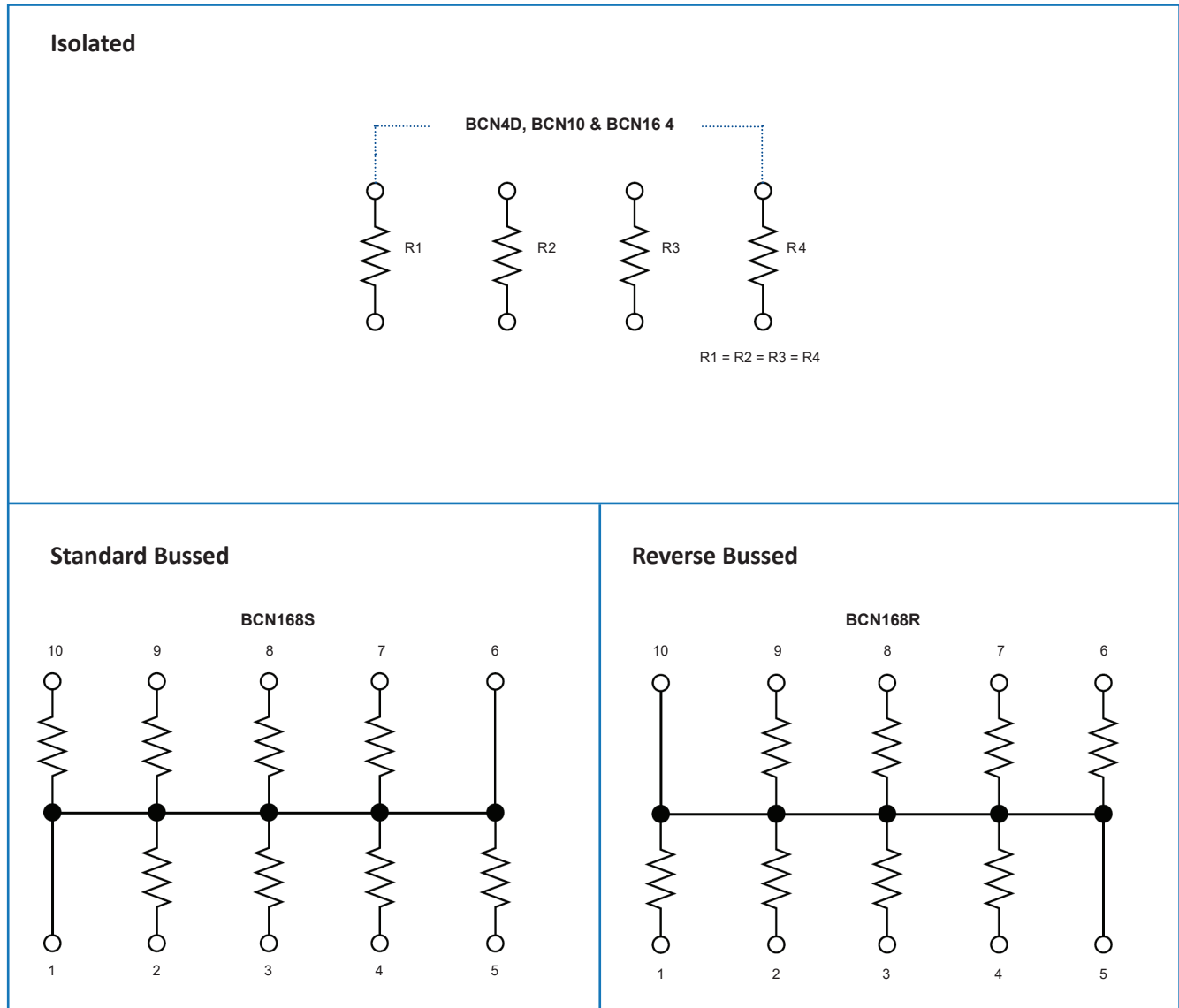
		BCN10	BCN164	BCN168	BCN4D
Resistor power rating @70°C	mW	63		32	125
Package power rating @70°C	mW	250			500
Limiting element voltage	V	25	50	25	75
Maximum overload voltage	V	63	125	63	188
Resistance range	ohms	10R – 1M0		100R – 1M0	10R – 1M0
Resistance tolerance	%	1, 5	1, 2, 5	5	1, 5
TCR	ppm/°C	±200			
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 **OBSOLETE (BCN4D only)**

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

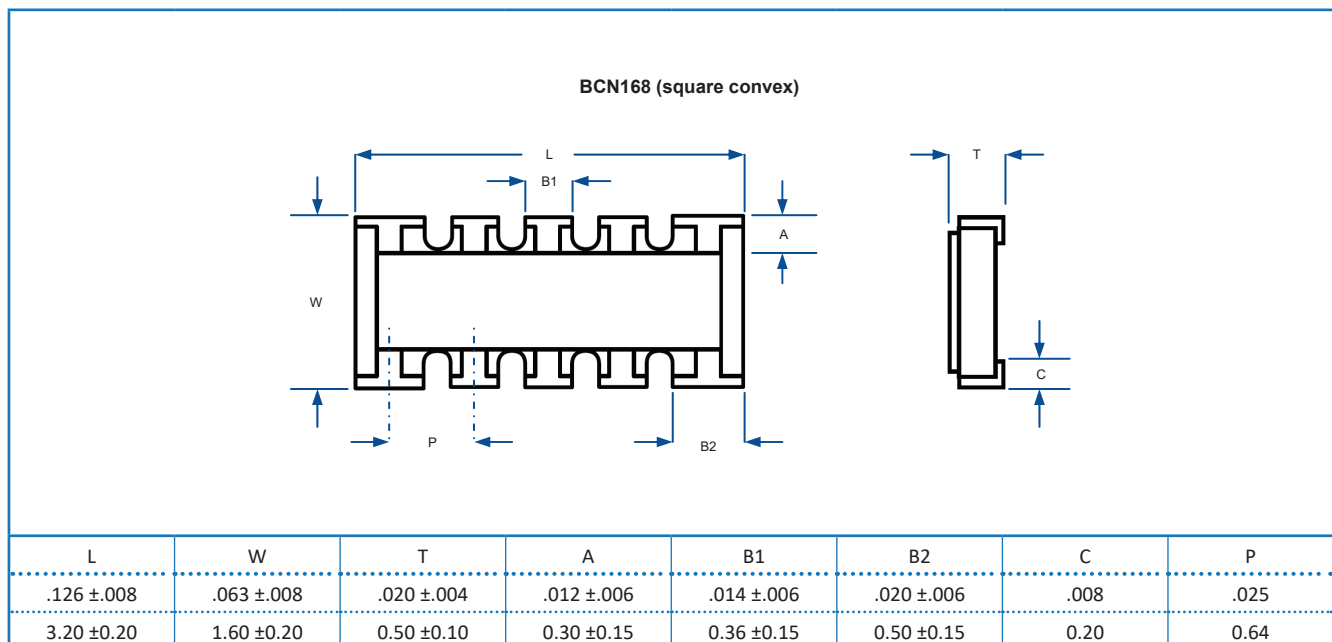
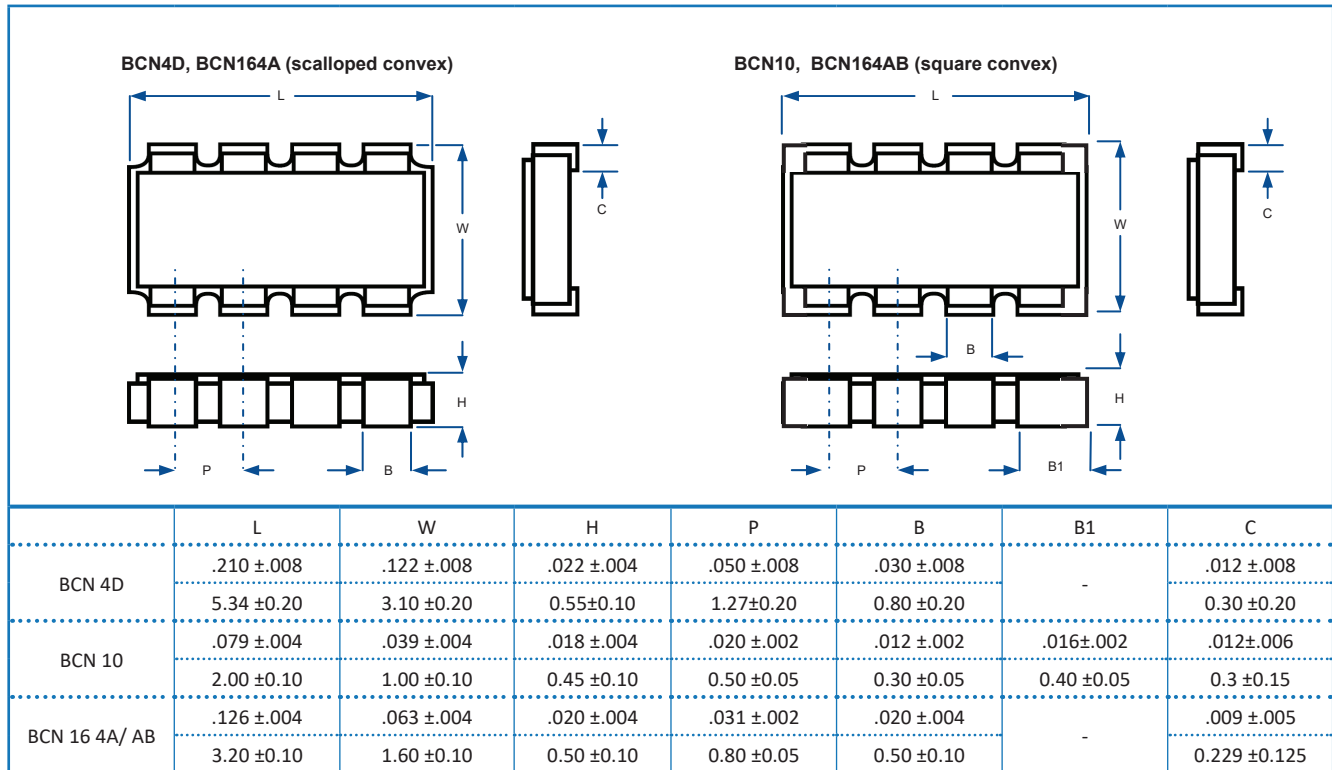
Note 1 – Anti-sulphur construction only

General Note

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BCN Series **OBSOLETE (BCN4D only)**

Physical Data (Inch /mm)

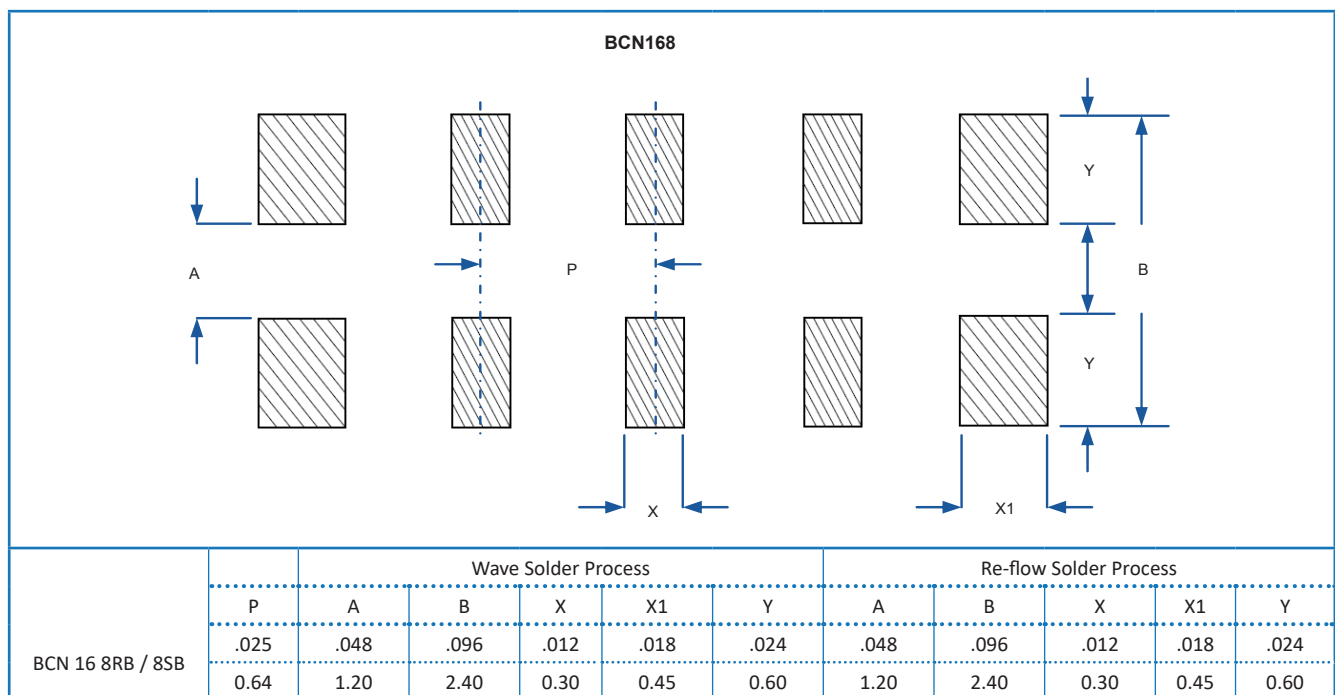
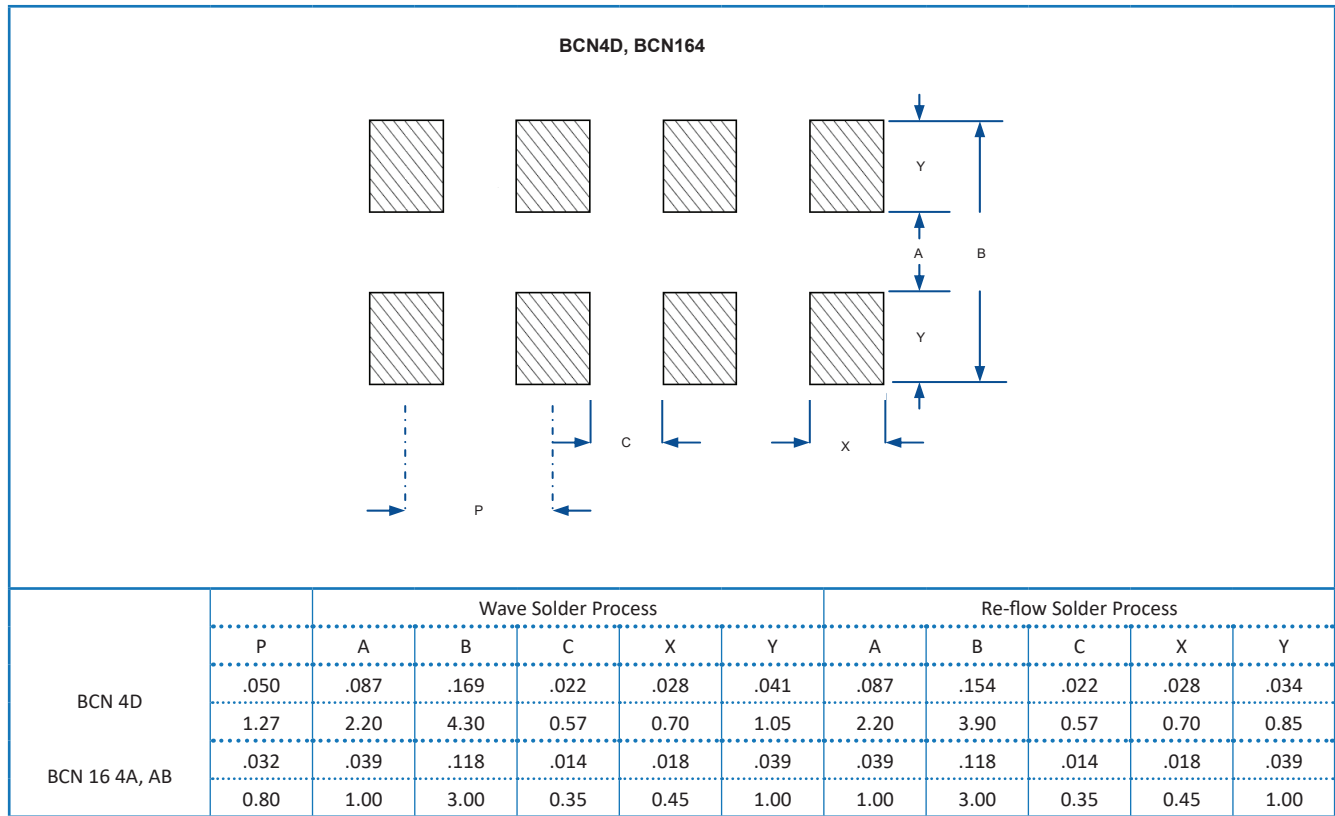


General Note

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BCN Series **OBSOLETE (BCN4D only)**

Solder pad layout (Inch / mm)

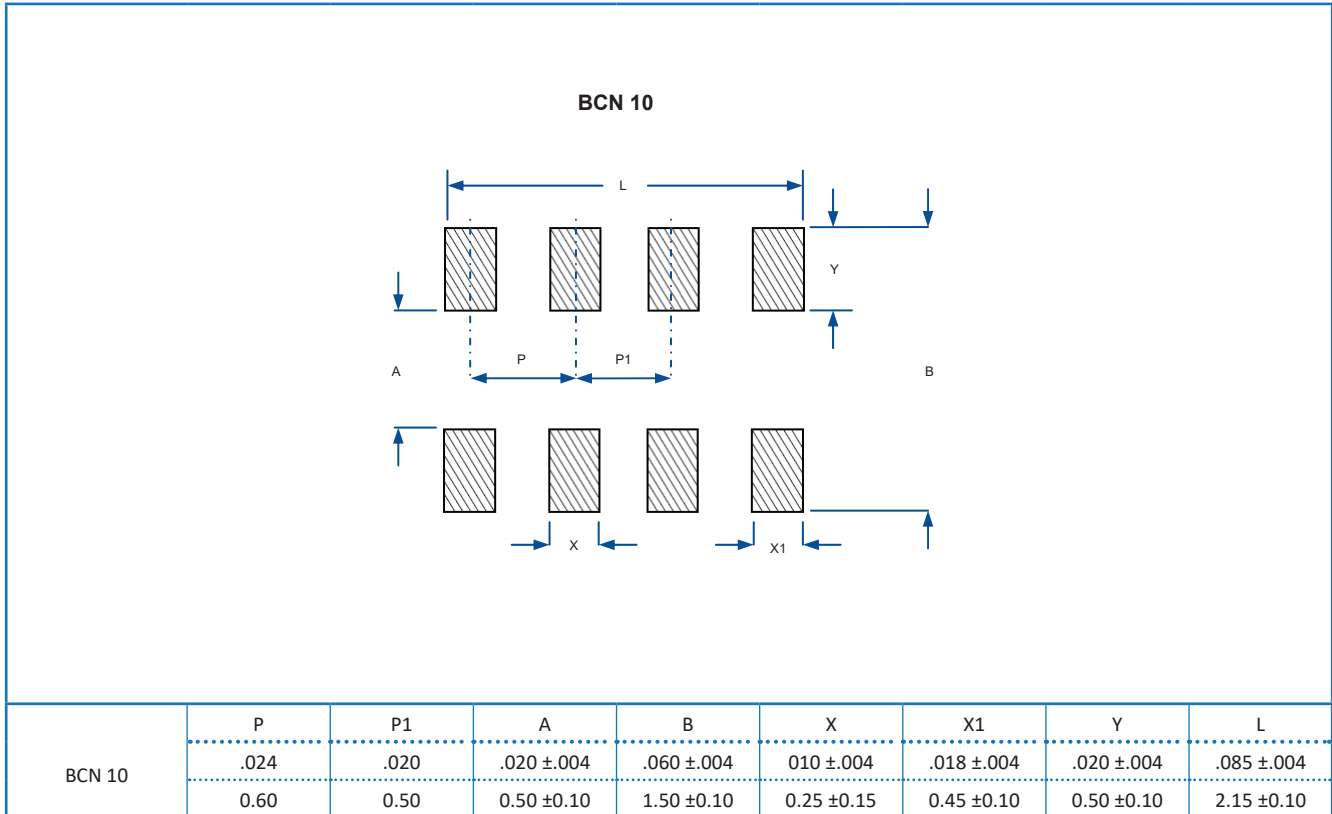


General Note

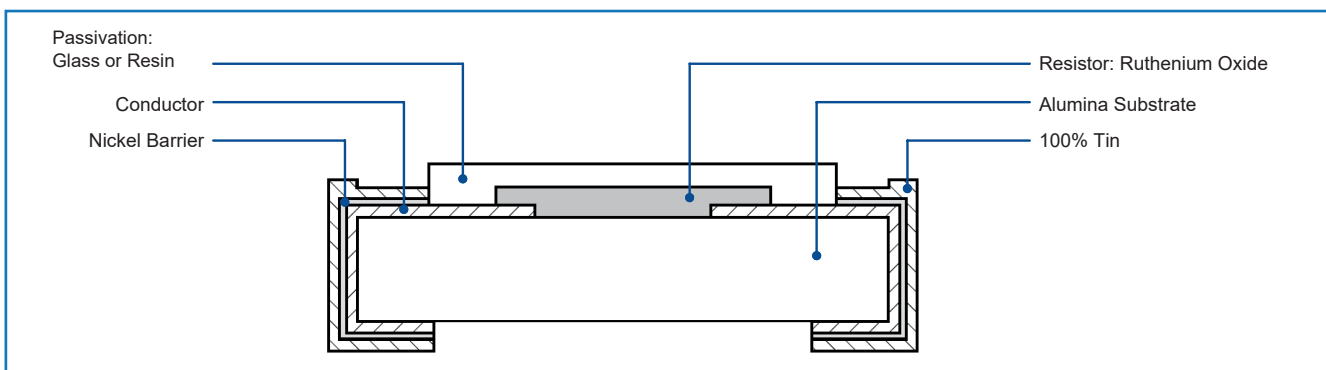
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BCN Series **OBSOLETE (BCN4D only)**

Solder pad layout (Inch / mm)



Construction



General Note

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BCN Series **OBSOLETE (BCN4D only)**

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	2	3	4	5	6	7	8	9
Series	Width	Number of Resistors	Circuit	Edge	Value	Tolerance	Packaging	Construction
BCN	Blank=3.1mm	4	A=Isolated	Blank=Scalloped	3 digits for E24 at 2% or 5%	F= $\pm 1\%$	7=7" reel	Blank=Standard
	10=1.0mm	8	D=Isolated	B=Square	4 digits for uniquely E96 and for all values at 1%	G= $\pm 2\%$	13=13" reel	S=Anti-sulphur
	16=1.6mm		S=Standard bussed			J= $\pm 5\%$		
	21=2.1mm		R=Reverse bussed		JP=Jumper	(Blank for 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				7=10,000/reel, 13=40,000/reel, Paper tape	
B	C	N	1	6	4	A		JP=Jumper, S=Anti-sulphur				7=5000/reel, 13=20,000/reel, Paper tape	
B	C	N	1	6	4	A	B	JP=Jumper, S=Anti-sulphur					
B	C	N	1	6	8	S	B						
B	C	N	1	6	8	R	B	S=Anti-sulphur					
B	C	N			4	D		JP=Jumper, S=Anti-sulphur				7=4000/reel, 13=16,000/reel, Plastic tape	

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