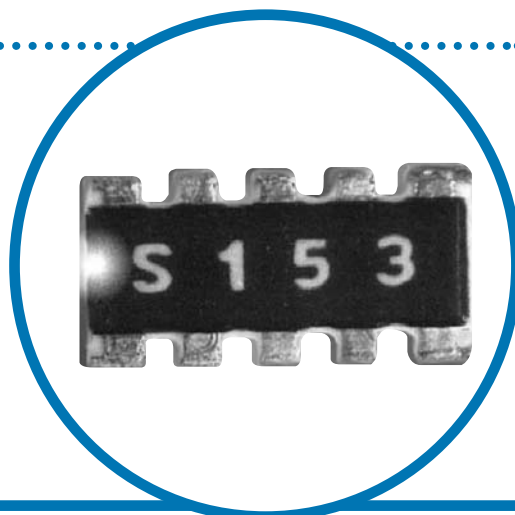


## BCN

### Features

- Thick Film
- Chip Resistor Arrays
- RoHS Compliant
- Sulphur resistant version available (Tested to ASTM-B809)
- Range extended to include 0201 size resistors



## Model Styles

| Model (Width)                  | # of Resistors | Circuit         | Package Size | Chip Array | Edge Finish / Termination |               |                |
|--------------------------------|----------------|-----------------|--------------|------------|---------------------------|---------------|----------------|
|                                |                |                 |              |            | Scalloped Convex          | Square Convex | Square Concave |
| Model BCN 06 2 (0.6mm)         | 2 Resistors    | Isolated        | 0302         | 0201       |                           | •             |                |
| Model BCN 06 4 (0.6mm)         | 4 Resistors    | Isolated        | 0502         | 0201       |                           | •             |                |
| Model BCN 2D (1.6mm)           | 2 Resistors    | Isolated        | 0606         | 0603       | •                         |               |                |
| Model BCN 10 (1.0mm)           | 4 Resistors    | Isolated        | 0804         | 0402       |                           | •             |                |
| Model BCN 16 4ABI (1.6mm)      | 4 Resistors    | Isolated        | 1206         | 0603       |                           |               | •              |
| Model BCN 16 4A/AB (1.6mm)     | 4 Resistors    | Isolated        | 1206         | 0603       | •                         | •             |                |
| Model BCN 16 8RB/8SB (1.6mm)   | 8 Resistors    | Bussed          | 1206         | 0603       |                           | •             |                |
| Model BCN 21 (2.1mm)           | 8 Resistors    | Bussed          | 1608         | 0804       |                           |               | •              |
| Model BCN 4D (3.1mm)           | 4 Resistors    | Isolated        | 2112         | 1206       | •                         |               |                |
| Model BCN 4DBI (3.1mm)         | 4 Resistors    | Isolated        | 2112         | 1206       |                           |               | •              |
| Model BCN 31 8RB/8SB (3.1mm)   | 8 Resistors    | Bussed          | 2512         | 1206       |                           | •             |                |
| Model BCN 31 8RBI/8SBI (3.1mm) | 8 Resistors    | Bussed          | 2512         | 1206       |                           |               | •              |
| Jumper Chip Array              | 4/8 Resistors  | Isolated/Bussed | All          | All        | •                         | •             | •              |

### Features

- Reliable monolithic construction
- Nickel barrier terminations
- Top side marking for easy identification
- Concave or convex termination styles
- Square or scalloped edges available

### Benefits

- Saves board space over equivalent rated chip resistors
- Eliminates up to seven pick & place operations
- Single component reliability
- Leadless chip, reduced inductance
- Mounts close to active devices

### Applications

- Pull up / pull down resistors for digital IC's
- Series termination on high speed data busses
- Current limit for LED displays
- Available as an 8 bit R/2R Ladder Network

#### General Note

TT electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT electronics' own data and is considered accurate at time of going to print.

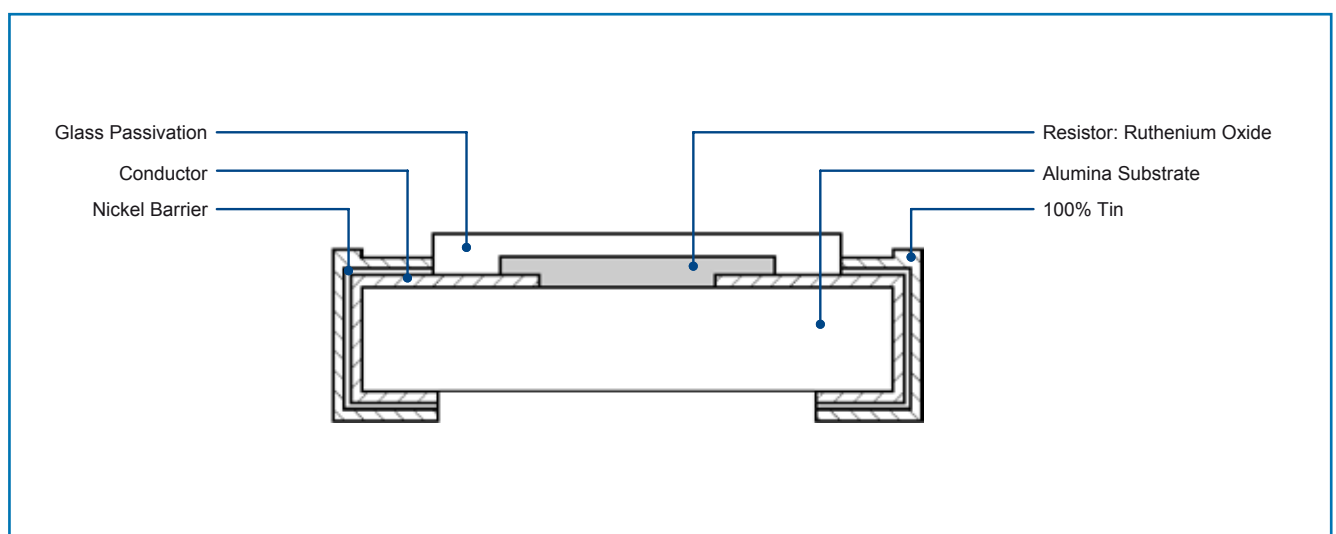
## Electrical

|                                 |                                                                                                                            |                                                                                                                                                                                                                                                                                             |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard Resistance Range, Ohms | BCN06 2, BCN06 4, BCN2D, BCN4D, BCN10, BCN16 4:<br>BCN 16 8R / 8S:<br>BCN 31 8R / 8S:<br>BCN 21:                           | 10 to 1 Megohm<br>100 to 1 Megohm<br>22 to 1 Megohm<br>68 to 220K                                                                                                                                                                                                                           |
| Standard Resistance Tolerance   | Optional: $\pm 1\%$ (F Tol.), BCN 4D, BCN 16 4, BCN31 8RB / 8SB Only<br>$\pm 2\%$ (G Tol.), BCN 16 4, BCN31 8RB / 8SB Only | $\pm 5\%$ (J Tol.)                                                                                                                                                                                                                                                                          |
| Operating Voltage, Maximum      | BCN 4D:<br>BCN 2D, BCN 16 4, BCN 31 8R / 8S:<br>BCN 10, BCN 16 8R / 8S, BCN 21:<br>BCN 06 2, BCN 06 4:                     | 75Vdc or $\sqrt{pr}$<br>50Vdc or $\sqrt{pr}$<br>25Vdc or $\sqrt{pr}$<br>12.5Vdc or $\sqrt{pr}$                                                                                                                                                                                              |
| Power Rating, watts at 70°C     | BCN 2D:<br>BCN 4D:<br>BCN 06 2:<br>BCN 06 4:<br>BCN 10, BCN 164:<br>BCN 16 8R / 8S:<br>BCN 21, BCN 31 8R / 8S:             | 63mW per Resistor / 125mW per Package<br>125mW per Resistor / 500mW per Package<br>31mW per Resistor / 63mW per Package<br>31mW per Resistor / 125mW per Package<br>63mW per Resistor / 250mW per Package<br>32mW per Resistor / 250mW per Package<br>63mW per Resistor / 500mW per Package |

## Environmental

|                                       |                                                                                             |                                        |
|---------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------|
| Operating Temperature Range           | -55°C to +125°C                                                                             |                                        |
| Temperature Coefficient of Resistance | BCN 2D:<br>BCN 06 2, BCN 06 4, BCN 4D, BCN 16 8R / 8S, BCN 21, BCN 31:<br>BCN 10, BCN 16 4: | ±300ppm/°C<br>±200ppm/°C<br>±200ppm/°C |
| Moisture Resistance                   | 1,000 hours @ +40°C, 95% R.H. (3.0% +0.1Ω ΔR)                                               |                                        |
| High Temperature Operation            | 1,000 hours @ 70°C (3.0% +0.1Ω ΔR)                                                          |                                        |
| Short Time Overload                   | 2.5 X rated voltage, 5 seconds (2.0% +0.1Ω ΔR)                                              |                                        |
| Temperature Cycling                   | -55°C to +125°C, 5 cycles (1.0% +0.1Ω ΔR)                                                   |                                        |
| Resistance to Solder Heat             | 260°C for 10 seconds (1.0% +0.1Ω ΔR)                                                        |                                        |
| Load Life                             | 1,000 hours @ 70°C (3.0% +0.1Ω ΔR)                                                          |                                        |

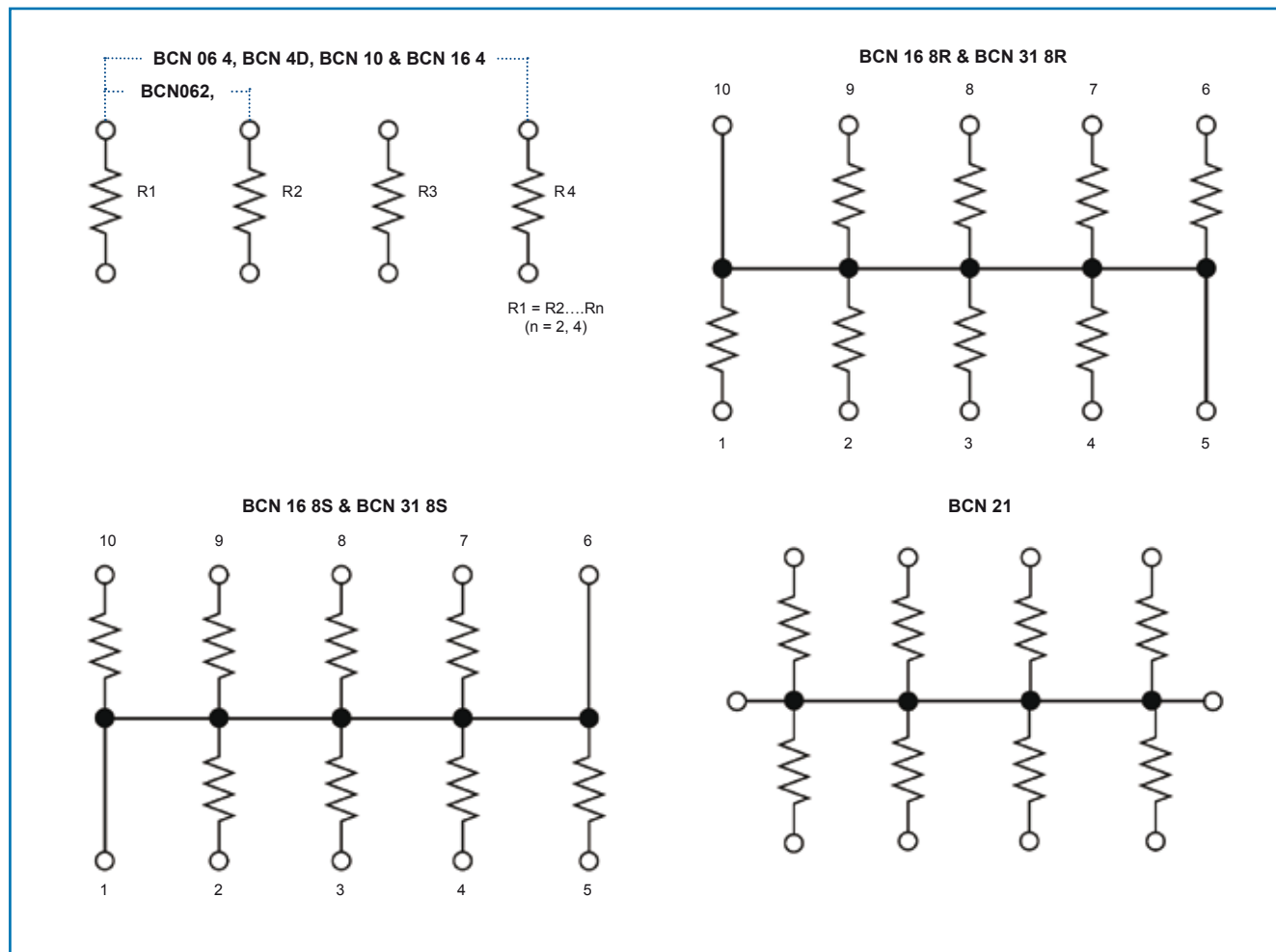
## Construction



## General Note

TT electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT electronics' own data and is considered accurate at time of going to print.

## Electrical



## Standard Resistance Values, Ohms

| Model BCN 06, BCN 2D, BCN 4D, BCN 10 & BCN 16 4 |     |      |     |      |        |
|-------------------------------------------------|-----|------|-----|------|--------|
| 10                                              | 100 | 1K   | 10K | 100K | 1 Meg  |
| 12                                              | 120 | 1.2K | 12K | 120K | Jumper |
| 15                                              | 150 | 1.5K | 15K | 150K |        |
| 18                                              | 180 | 1.8K | 18K | 180K |        |
| 22                                              | 220 | 2.2K | 22K | 220K |        |
| 27                                              | 270 | 2.7K | 27K | 270K |        |
| 33                                              | 330 | 3.3K | 33K | 330K |        |
| 39                                              | 390 | 3.9K | 39K | 390K |        |
| 47                                              | 470 | 4.7K | 47K | 470K |        |
| 56                                              | 560 | 5.6K | 56K | 560K |        |
| 68                                              | 680 | 6.8K | 68K | 680K |        |
| 82                                              | 820 | 8.2K | 82K | 820K |        |

| Model BCN 16 8R & BCN 16 8S |      |     |       |
|-----------------------------|------|-----|-------|
| 220                         | 1K   | 10K | 100K  |
| 330                         | 4.7K | 47K | 1 Meg |

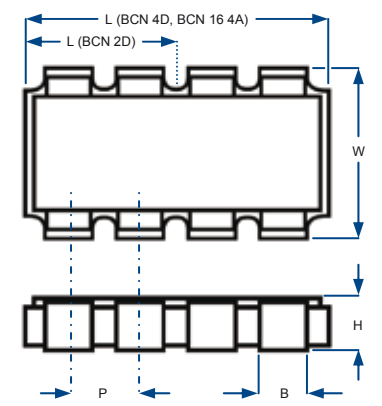
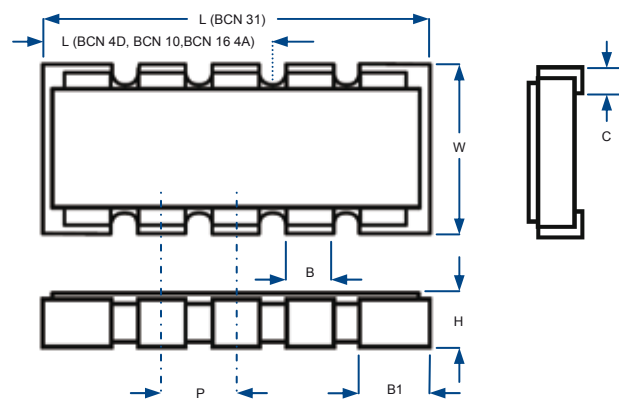
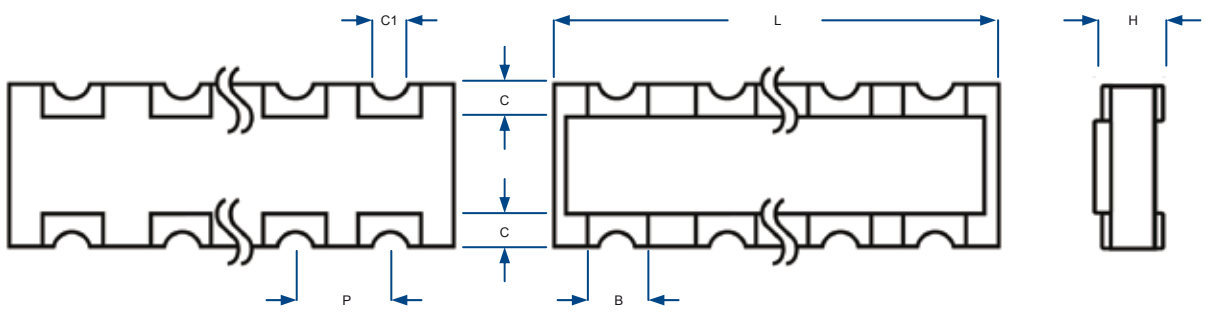
| Model BCN 31 8R |      | Model BCN 31 8S |       |
|-----------------|------|-----------------|-------|
| 220             | 2.2K | 10K             | 100K  |
| 330             | 2.7K | 22K             | 470K  |
| 1K              | 4.7K | 47K             | 1 Meg |

| Model BCN 21 |     |      |      |
|--------------|-----|------|------|
| 68           | 330 | 4.7K | 10K  |
| 220          | 1K  | 47K  | 100K |

### General Note

TT electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT electronics' own data and is considered accurate at time of going to print.

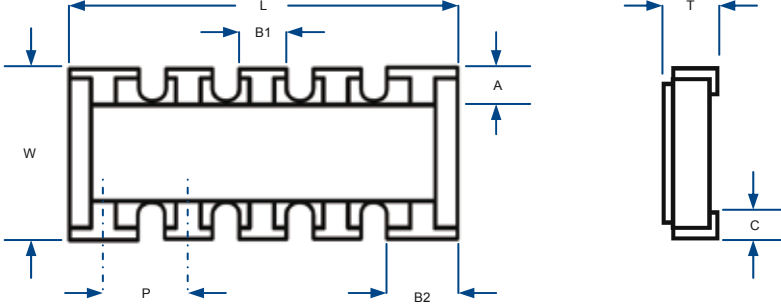
## Outline Dimensions (Inch /mm)

| <div> <div> <b>Scalloped Edge: Models BCN 2D, 4D, 16 4A</b>  </div> <div> <b>Exterior Termination (Convex)</b><br/> <b>Square Edge: Models BCN 16 4AB, 31</b>  </div> </div> |            |                   |            |             |            |            |                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|------------|-------------|------------|------------|---------------------|
|                                                                                                                                                                                                                                                                                                                                                 | L          | W                 | H          | P           | B          | B1         | C                   |
| BCN 2D                                                                                                                                                                                                                                                                                                                                          | .063 ±.006 | .063 ±.006        | .020 ±.006 | .031 ±.004  | .020 ±.004 | -          | .010 ±.004          |
|                                                                                                                                                                                                                                                                                                                                                 | 1.60 ±0.15 | 1.60 ±0.15        | 0.50 ±0.15 | 0.80 ±0.10  | 0.50 ±0.10 | -          | 0.25 ±0.10          |
| BCN 4D                                                                                                                                                                                                                                                                                                                                          | .210 ±.008 | .122 ±.008        | .022 ±.004 | .050 ±.008  | .030 ±.008 | -          | .012 ±.008          |
|                                                                                                                                                                                                                                                                                                                                                 | 5.34 ±0.20 | 3.10 ±0.20        | 0.55 ±0.10 | 1.27 ±0.20  | 0.80 ±0.20 | -          | 0.30 ±0.20          |
| BCN 10                                                                                                                                                                                                                                                                                                                                          | .079 ±.008 | .039 ±.006        | .014 ±.004 | .020 ±.004  | .012 ±.006 | .016 ±.006 | .006 ±.002          |
|                                                                                                                                                                                                                                                                                                                                                 | 2.00 ±0.20 | 1.00 ±0.15        | 0.36 ±0.10 | 0.50 ±0.10  | 0.30 ±0.15 | 0.40 ±0.15 | 0.15 ±0.05          |
| BCN 16 4A/ AB                                                                                                                                                                                                                                                                                                                                   | .126 ±.004 | .063 ±.004        | .020 ±.004 | .031 ±.002  | .020 ±.004 | -          | .009 ±.005          |
|                                                                                                                                                                                                                                                                                                                                                 | 3.20 ±0.10 | 1.60 ±0.10        | 0.50 ±0.10 | 0.80 ±0.05  | 0.50 ±0.10 | -          | 0.229 ±0.125        |
| BCN 31                                                                                                                                                                                                                                                                                                                                          | .252 ±.008 | .122 ±.012, -.008 | .022 ±.004 | .050 ±.002  | .032 ±.004 | .041 ±.004 | .012 ±.004          |
|                                                                                                                                                                                                                                                                                                                                                 | 6.40 ±0.20 | 3.1 +0.3, -0.2    | 0.55 ±0.10 | 1.27 ±0.051 | 0.80 ±0.10 | 1.05 ±0.10 | 0.30 ±0.10          |
| <div> <b>Interior Termination (Concave)</b><br/> <b>Square Edge: Models BCN 4 DBI, 16 4ABI, 31</b>  </div>                                                                                                                                                  |            |                   |            |             |            |            |                     |
|                                                                                                                                                                                                                                                                                                                                                 | L          | W                 | H          | P           | B          | C          | C1                  |
| BCN 4 DBI                                                                                                                                                                                                                                                                                                                                       | .210 ±.008 | .122 ±.008        | .022 ±.004 | .050 ±.008  | .030 ±.008 | .012 ±.008 | -                   |
|                                                                                                                                                                                                                                                                                                                                                 | 5.34 ±0.20 | 3.10 ±0.20        | 0.55 ±0.10 | 1.27 ±0.20  | 0.80 ±0.20 | 0.30 ±0.20 | -                   |
| BCN 16 4ABI                                                                                                                                                                                                                                                                                                                                     | .126 ±.008 | .063 ±.006        | .024 ±.004 | .031 ±.004  | .016 ±.006 | .012 ±.008 | .012 ±.008          |
|                                                                                                                                                                                                                                                                                                                                                 | 3.20 ±0.20 | 1.60 ±0.15        | 0.60 ±0.10 | 0.80 ±0.10  | 0.40 ±0.15 | 0.30 ±0.20 | 0.30 ±0.20          |
| BCN 31                                                                                                                                                                                                                                                                                                                                          | .252 ±.008 | .122 ±.008        | .024 ±.004 | .050        | .028 ±.008 | .012       | .012 +.008<br>-.004 |
|                                                                                                                                                                                                                                                                                                                                                 | 6.40 ±0.20 | 3.10 ±0.20        | 0.60 ±0.10 | 1.27        | 0.70 ±0.20 | 0.30       | 0.30 +.02<br>-.01   |

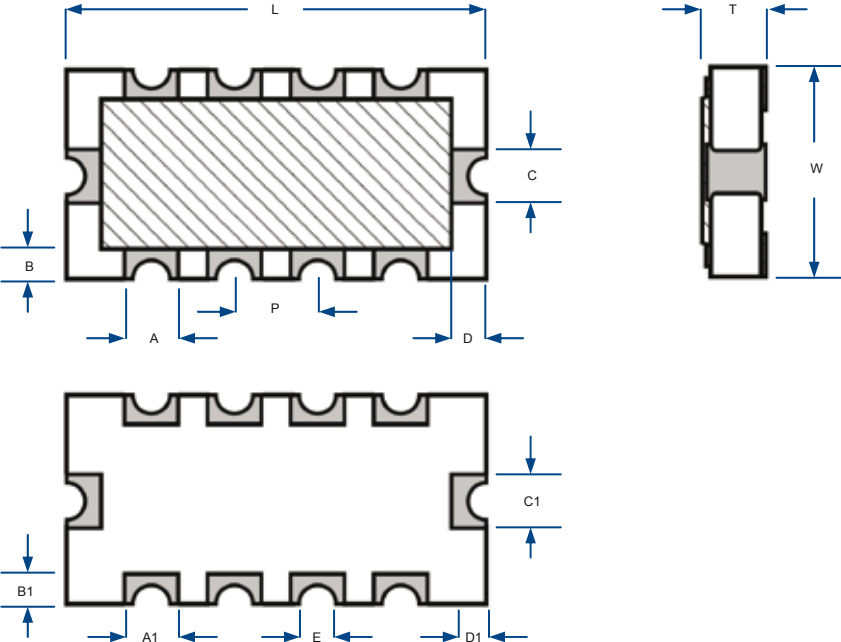
## General Note

TT electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT electronics' own data and is considered accurate at time of going to print.

## Outline Dimensions (Inch /mm)

| Exterior Termination (Convex)<br>Square Edge: Models BCN 16 8R, 8S                 |            |            |            |            |            |      |      |
|------------------------------------------------------------------------------------|------------|------------|------------|------------|------------|------|------|
|  |            |            |            |            |            |      |      |
| L                                                                                  | W          | T          | A          | B1         | B2         | C    | P    |
| .126 ±.008                                                                         | .063 ±.008 | .020 ±.004 | .012 ±.006 | .014 ±.006 | .020 ±.006 | .008 | .025 |
| 3.20 ±0.20                                                                         | 1.60 ±0.20 | 0.50 ±0.10 | 0.30 ±0.15 | 0.36 ±0.15 | 0.50 ±0.15 | 0.20 | 0.64 |

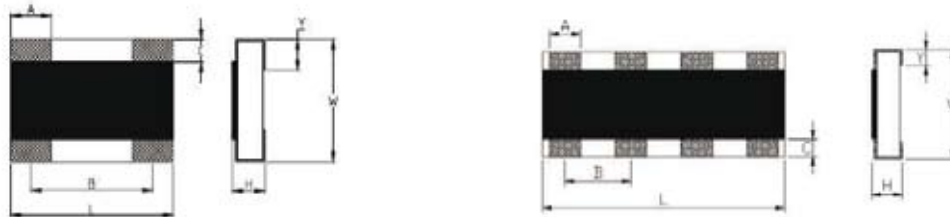
| Interior Termination (Concave)<br>Square Edge: Models BCN 21                         |            |            |            |            |            |            |
|--------------------------------------------------------------------------------------|------------|------------|------------|------------|------------|------------|
|  |            |            |            |            |            |            |
| L                                                                                    | W          | T          | A          | B          | C          | D          |
| .157 ±.008                                                                           | .083 ±.008 | .021 ±.004 | .020 ±.008 | .010 ±.008 | .020 ±.008 | .012 ±.008 |
| 4.00 ±0.20                                                                           | 2.10 ±0.20 | 0.55 ±0.10 | 0.50 ±0.20 | 0.25 ±0.20 | 0.50 ±0.20 | 0.30 ±0.20 |
| A1                                                                                   | B1         | C1         | D1         | E          | P          |            |
| .016 ±.008                                                                           | .014 ±.008 | .020 ±.008 | .014 ±.008 | .012 Typ.  | .032 Typ.  |            |
| 0.40 ±0.20                                                                           | 0.40 ±0.20 | 0.50 ±0.20 | 0.35 ±0.20 | 0.30       | 0.80       |            |

## General Note

TT electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT electronics' own data and is considered accurate at time of going to print.

## Outline Dimensions

Exterior Termination (Convex)  
Square Edge: Models BCN 06 2, BCN 06 4

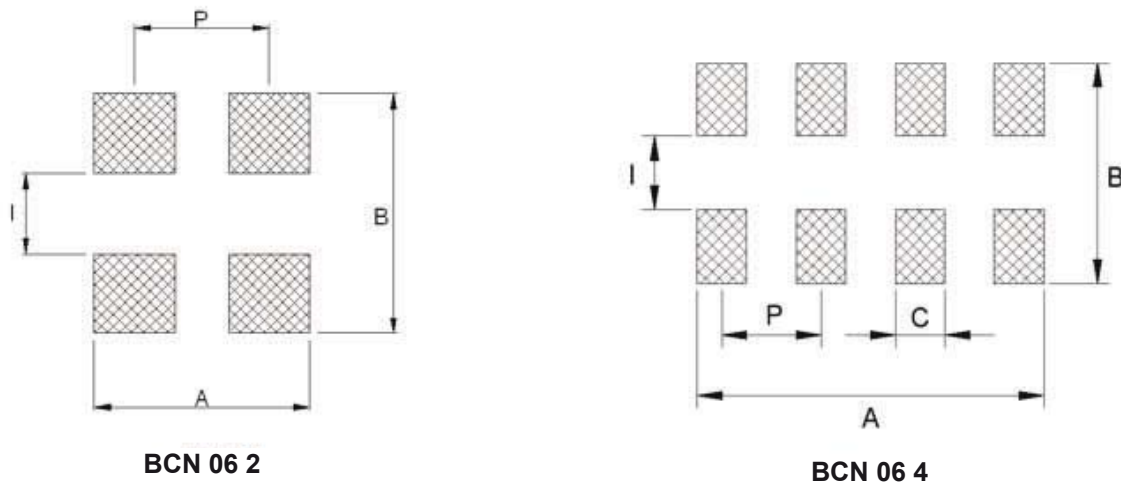


Unit : mm

| Type     | Number of Resistors | L               | W               | H               | A               | B               | C               | Y               | Weight (g) (1000pcs) |
|----------|---------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------|
| BCN 06 2 | 2                   | $0.80 \pm 0.10$ | $0.60 \pm 0.10$ | $0.35 \pm 0.10$ | $0.30 \pm 0.10$ | $0.50 \pm 0.10$ | $0.15 \pm 0.10$ | $0.15 \pm 0.10$ | 0.500                |
| BCN 06 4 | 4                   | $1.40 \pm 0.10$ | $0.60 \pm 0.10$ | $0.35 \pm 0.10$ | $0.20 \pm 0.10$ | $0.40 \pm 0.10$ | $0.10 \pm 0.07$ | $0.15 \pm 0.05$ | 0.833                |

## Solder Pad Layout

Exterior Termination (Convex)  
Square Edge: Models BCN 06 2, BCN 06 4



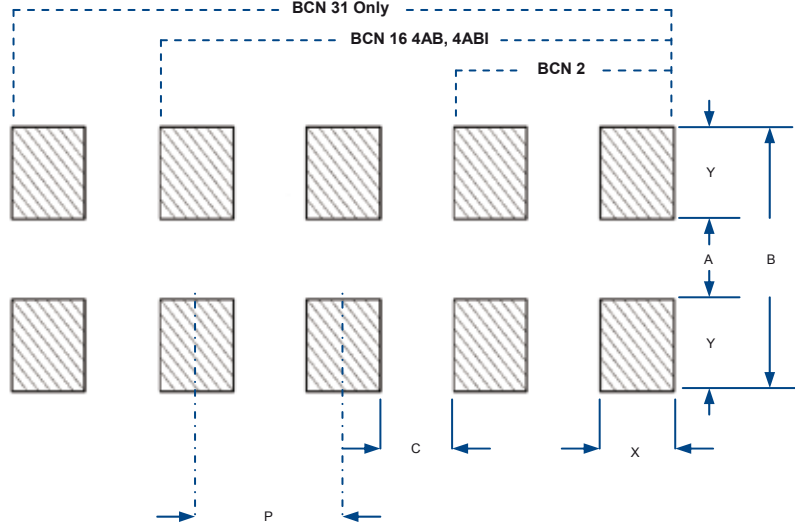
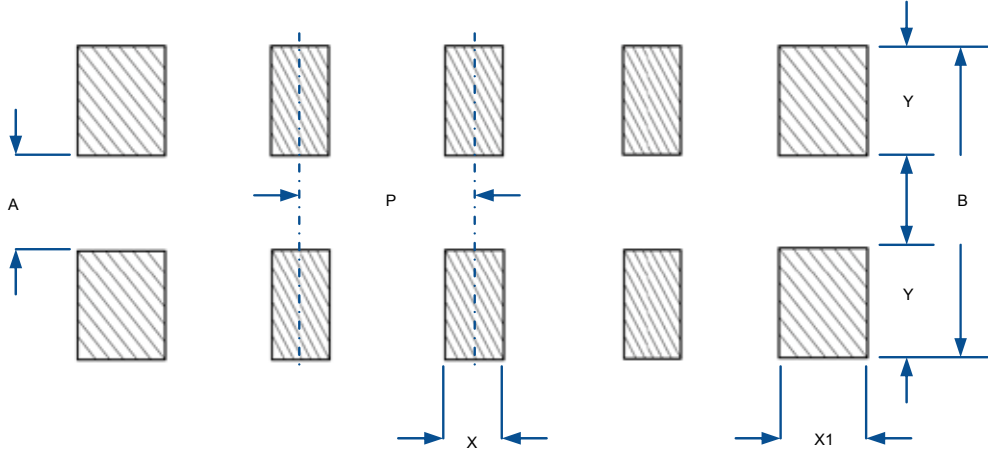
Unit : mm

| Type     | A    | B    | C    | I    | P    |
|----------|------|------|------|------|------|
| BCN 06 2 | 0.80 | 0.90 | -    | 0.30 | 0.50 |
| BCN 06 4 | 1.40 | 0.90 | 0.20 | 0.30 | 0.40 |

## General Note

TT electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT electronics' own data and is considered accurate at time of going to print.

## Solder pad layout (Inch / mm)

|                            |                     |      |      |      |      |      |                        |      |      |      |      |
|--------------------------------------------------------------------------------------------------------------|---------------------|------|------|------|------|------|------------------------|------|------|------|------|
| <b>BCN 2D</b><br><br><b>BCN 4D/4DBI</b><br><br><b>BCN 16 4A, AB, ABI</b><br><br><b>BCN 31 8R, 8S</b>         | Wave Solder Process |      |      |      |      |      | Re-flow Solder Process |      |      |      |      |
|                                                                                                              | P                   | A    | B    | C    | X    | Y    | A                      | B    | C    | X    | Y    |
|                                                                                                              | .032                | .039 | .102 | .014 | .018 | .032 | .039                   | .079 | .014 | .018 | .020 |
|                                                                                                              | 0.80                | 1.00 | 2.60 | 0.35 | 0.45 | 0.80 | 1.00                   | 2.00 | 0.35 | 0.45 | 0.50 |
|                                                                                                              | .050                | .087 | .169 | .022 | .028 | .041 | .087                   | .154 | .022 | .028 | .034 |
|                                                                                                              | 1.27                | 2.20 | 4.30 | 0.57 | 0.70 | 1.05 | 2.20                   | 3.90 | 0.57 | 0.70 | 0.85 |
|                                                                                                              | .032                | .039 | .118 | .014 | .018 | .039 | .039                   | .118 | .014 | .018 | .039 |
|                                                                                                              | 0.80                | 1.00 | 3.00 | 0.35 | 0.45 | 1.00 | 1.00                   | 3.00 | 0.35 | 0.45 | 1.00 |
|                                                                                                              | .050                | .084 | .148 | .014 | .036 | .032 | .084                   | .148 | .014 | .036 | .032 |
|                                                                                                              | 1.27                | 2.10 | 3.70 | 0.35 | 0.90 | 0.80 | 2.10                   | 3.70 | 0.35 | 0.90 | 0.80 |
| <b>BCN 16 8RB / 8SB</b>  |                     |      |      |      |      |      |                        |      |      |      |      |
| <b>BCN 16 8RB / 8SB</b>                                                                                      | Wave Solder Process |      |      |      |      |      | Re-flow Solder Process |      |      |      |      |
|                                                                                                              | P                   | A    | B    | X    | X1   | Y    | A                      | B    | X    | X1   | Y    |
|                                                                                                              | .025                | .048 | .096 | .012 | .018 | .024 | .048                   | .096 | .012 | .018 | .024 |
|                                                                                                              | 0.64                | 1.20 | 2.40 | 0.30 | 0.45 | 0.60 | 1.20                   | 2.40 | 0.30 | 0.45 | 0.60 |

## General Note

TT electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT electronics' own data and is considered accurate at time of going to print.

## Solder pad layout (Inch / mm)

BCN 10

The diagram illustrates the BCN 10 layout, which consists of two rows of four rectangular pads each. The top row is labeled 'A' on the left and 'B' on the right. The bottom row is labeled 'X' and 'X1' below the pads. Dimensions are indicated by arrows: 'L' is the total length of the top row; 'P' is the pitch between the first three pads; 'P1' is the pitch between the first and second pads; 'A' is the width of the top row; 'B' is the width of the bottom row; 'X' is the width of the bottom row; 'X1' is the width of the bottom row; 'Y' is the width of the top row.

BCN 10

| P    | P1   | A          | B          | X          | X1         | Y          | L          |
|------|------|------------|------------|------------|------------|------------|------------|
| .024 | .020 | .020 ±.004 | .060 ±.004 | .010 ±.004 | .018 ±.004 | .020 ±.004 | .085 ±.004 |
| 0.60 | 0.50 | 0.50 ±0.10 | 1.50 ±0.10 | 0.25 ±0.15 | 0.45 ±0.10 | 0.50 ±0.10 | 2.15 ±0.10 |

BCN 21

The diagram illustrates the BCN 21 layout, which consists of two rows of four rectangular pads each. The top row is labeled 'A' on the right and 'B' on the right. The bottom row is labeled 'X' below the pads. Dimensions are indicated by arrows: 'L' is the total length of the top row; 'A' is the width of the top row; 'B' is the width of the bottom row; 'C' is the width of the top row; 'X' is the width of the bottom row; 'Y' is the width of the top row; 'W' is the width of the top row; 'W1' is the width of the top row; 'W2' is the width of the top row; 'W3' is the width of the top row.

BCN 21

| P    | A          | B          | C          | X          | Y          | W          | W1         | W2         | W3         | L          |
|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| .032 | .060 ±.008 | .120 ±.008 | .016 ±.004 | .016 ±.004 | .030 ±.004 | .012 ±.001 | .015 ±.004 | .030 ±.004 | .030 ±.004 | .196 ±.008 |
| 0.80 | 1.20 ±0.20 | 3.00 ±0.20 | 0.40 ±0.10 | 0.40 ±0.10 | 0.75 ±0.10 | 0.31 ±0.02 | 0.38 ±0.10 | 0.75 ±0.10 | 0.75 ±0.10 | 4.98 ±0.20 |

## General Note

TT electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT electronics' own data and is considered accurate at time of going to print.



## Ordering Information

|                                                                                                                                          |            |          |          |          |          |            |          |          |          |                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|----------|----------|----------|------------|----------|----------|----------|-----------------------------------------------------------------------------------------------------|
| Model Series                                                                                                                             | <b>BCN</b> | <b>4</b> | <b>D</b> | <b>B</b> | <b>I</b> | <b>102</b> | <b>J</b> | <b>7</b> | <b>S</b> | Construction Option:<br>No code = Standard product<br>S = Sulphur resistant - only<br>on BCN4DxxxJ7 |
| No. of Resistors:                                                                                                                        |            |          |          |          |          |            |          |          |          | Packaging Option:<br>7" or 13"<br>(See Table A)                                                     |
| BCN 2D = 2 Resistors<br>BCN 4D = 4 Resistors                                                                                             |            |          |          |          |          |            |          |          |          | Tolerance: $\pm 5\%$                                                                                |
| Circuit Configuration:<br>D = Isolated                                                                                                   |            |          |          |          |          |            |          |          |          | Resistance Code                                                                                     |
| Edge Option (B = Square Edge):<br>BCN 2D: Scalloped Edge <b>Only</b> - No Code Used<br>BCN 4D: Scalloped Edge <b>Only</b> - No Code Used |            |          |          |          |          |            |          |          |          | Termination Code:<br>I = Interior (Concave) Termination<br>(Only available in BCN 4 DBI)            |

|                                                                                                                                                              |            |           |          |          |          |          |            |          |          |          |                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|----------|----------|----------|----------|------------|----------|----------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Series                                                                                                                                                 | <b>BCN</b> | <b>16</b> | <b>4</b> | <b>A</b> | <b>B</b> | <b>I</b> | <b>102</b> | <b>J</b> | <b>7</b> | <b>S</b> | Construction Option:<br>No code = Standard product<br>S = Sulphur resistant - only<br>on BCN 104/164/168RB                                                                                                 |
| Width:<br>06 = 0.6mm<br>10 = 1.0mm<br>16 = 1.6mm<br>21 = 2.1mm<br>31 = 3.1mm                                                                                 |            |           |          |          |          |          |            |          |          |          | Packaging Option:<br>7" or 13"<br>(See Table A)                                                                                                                                                            |
| No. of Resistors:<br>BCN 06 2 = 2 Resistors<br>BCN 10 / 06 4 / 16 4 = 4 Resistors<br>BCN 16 8R / 16 8S = 8 Resistors<br>BCN 21 / 31 8R / 31 8S = 8 Resistors |            |           |          |          |          |          |            |          |          |          | Tolerance:<br>F = $\pm 1\%$ (BCN 4D / 16 4 / 31 8RB / 31 8SB)<br>G = $\pm 2\%$ (BCN 16 4, 31 8RB / 8SB Only)<br>J = $\pm 5\%$ (Standard)<br>(Use JP for Jumper Chip Array - BCN 16 4 / 31)                 |
| Circuit Configuration:<br>A = Isolated (BCN 06 / 10 / 16 4A)<br>R = Bussed (Reversed) (BCN 16 8R / 31 8R)<br>S = Bussed (Standard) (BCN 21 / 16 8S / 31 8S)  |            |           |          |          |          |          |            |          |          |          | Resistance Code:<br>3 digits for E4,E12,E24 Series, all Tol.<br>4 digits for E96 Series, 1% Tol.                                                                                                           |
| Edge Option (B = Square Edge):<br>Scalloped Edge - No Code Used (Standard)<br>Square Edge <b>Only</b> - Use Code 'B'                                         |            |           |          |          |          |          |            |          |          |          | Termination Code:<br>I = Interior (Concave) Termination<br>No code used for exterior termination ( Standard)<br>All interior termination requires 'B' for square edge<br>(BCN 16 4ABI / 31 8RBI / 31 8SBI) |

**See 'Model Styles' for Available Options**

### General Note

TT electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT electronics' own data and is considered accurate at time of going to print.



www.bitechnologies.com www.ircct.com www.welwyn-tt.com

## Packaging (Table A)

|          | 7" Reel Diameter |          | 13" Reel Diameter |          |
|----------|------------------|----------|-------------------|----------|
|          | Paper            | Embossed | Paper             | Embossed |
| BCN 2D   | 5K               |          | 20K               |          |
| BCN 4D   |                  | 4K       |                   | 16K      |
| BCN 06 2 | 10K              |          |                   |          |
| BCN 06 4 | 10K              |          |                   |          |
| BCN 10   | 10K              |          | 40K               |          |
| BCN 16 4 | 5K               |          | 20K               |          |
| BCN 16 8 | 5K               |          | 20K               |          |
| BCN 21   |                  | 4K       |                   | 16K      |
| BCN 31   |                  | 4K       |                   | 16K      |

Note: Tape & Reel dimensions per EIA-481.

## Sulphur Resistant Arrays

- Special construction resists sulphide growth
- Withstands sulphur bearing fume environment
- Tested to ASTM-B809 ("Flowers-of-Sulphur")
- Suitable for industrial, automotive and roadside uses
- RoHS compliant matt Tin finish terminations

## Performance Data

## Hydrogen Sulphide exposure:

- 1000 Hours, 3-5ppm H<sub>2</sub>S, 50°C, 92%RH
- 0.5% Max ΔR and no visual defects

## General Note

TT electronics reserves the right to make changes in product specification without notice or liability.  
All information is subject to TT electronics' own data and is considered accurate at time of going to print.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## BI Technologies:

[BCN164A100J13](#) [BCN164A102J7](#) [BCN164A103J13](#) [BCN164A121J7](#) [BCN164A151J7](#) [BCN164A220J7](#)  
[BCN164A272J7](#) [BCN164A330J13](#) [BCN164A390J13](#) [BCN164A472J13](#) [BCN164A562J7](#) [BCN164A822J13](#)  
[BCN164AB102J7](#) [BCN164AB103J7](#) [BCN164AB104J7](#) [BCN164AB274J7](#) [BCN164AB3090F7](#) [BCN164AB330J7](#)  
[BCN164AB470J7](#) [BCN164AB472J7](#) [BCN164AB473J7](#) [BCN164AB4992F7](#) [BCN164ABI102J7](#) [BCN164ABI104J7](#)  
[BCN164ABI224J7](#) [BCN164ABI330J7](#) [BCN164ABI683J7](#) [BCN168RB103J7](#) [BCN318RB331J7](#) [BCN4D220J7](#)  
[BCN4D470J7](#) [BCN4D560J7](#) [BCN164AB101J7](#) [BCN164AB220J7](#) [BCN104AB330J7](#) [BCN164ABJP7](#)  
[BCN168RB102J7](#) [BCN164A100J7](#) [BCN164A101J7](#) [BCN164A102J13](#) [BCN164A105J7](#) [BCN164A111J7](#)  
[BCN164A120J7](#) [BCN164A122J7](#) [BCN164A150J7](#) [BCN164A151J13](#) [BCN164A153J7](#) [BCN164A161J7](#)  
[BCN164A180J7](#) [BCN164A181J7](#) [BCN164A183J7](#) [BCN164A200J7](#) [BCN164A202J7](#) [BCN164A203J7](#)  
[BCN164A220J13](#) [BCN164A221J7](#) [BCN164A222J13](#) [BCN164A222J7](#) [BCN164A224J7](#) [BCN164A240J7](#)  
[BCN164A241J7](#) [BCN164A243J7](#) [BCN164A272J13](#) [BCN164A273J7](#) [BCN164A274J13](#) [BCN164A274J7](#)  
[BCN164A300J7](#) [BCN164A301J7](#) [BCN164A331J13](#) [BCN164A331J7](#) [BCN164A332J7](#) [BCN164A334J7](#)  
[BCN164A360J7](#) [BCN164A390J7](#) [BCN164A391J7](#) [BCN164A392J7](#) [BCN164A430J7](#) [BCN164A470J13](#)  
[BCN164A470J7](#) [BCN164A471J7](#) [BCN164A473J13](#) [BCN164A474J7](#) [BCN164A510J7](#) [BCN164A511J7](#)  
[BCN164A513J7](#) [BCN164A560J13](#) [BCN164A560J7](#) [BCN164A562J13](#) [BCN164A623J7](#) [BCN164A680J13](#)  
[BCN164A680J7](#) [BCN164A681J13](#) [BCN164A681J7](#) [BCN164A682J7](#) [BCN164A683J7](#) [BCN164A750J7](#)  
[BCN164A751J7](#) [BCN164A820J7](#) [BCN164A821J7](#) [BCN164A822J7](#)