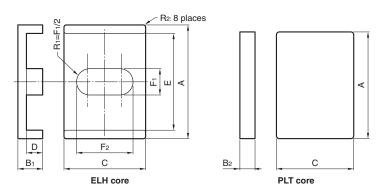
### FERRITES

**公TDK** 

## Mn-Zn ELT Cores

### **SHAPES AND DIMENSIONS**





| PC95     | ELT11X3        | - | Z                                |
|----------|----------------|---|----------------------------------|
|          |                |   |                                  |
| Material | Size of E core |   | AL-value<br>(Z: without air gap) |

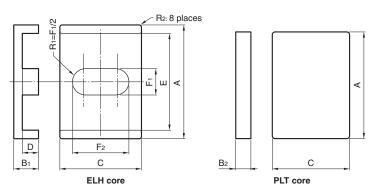
| Part No.(ELH+PLT) | Dimensions<br>(mm) |                |                |            |           |            |           |                |                |
|-------------------|--------------------|----------------|----------------|------------|-----------|------------|-----------|----------------|----------------|
|                   | Α                  | B <sub>1</sub> | B <sub>2</sub> | С          | D         | E          | F1        | F <sub>2</sub> | R <sub>2</sub> |
| PC95ELT11X3-Z     | 11.00±0.20         | 2.01±0.10      | 1.01±0.05      | 8.80±0.20  | 1.00±0.10 | 9.17±0.20  | 2.78±0.10 | 6.40±0.15      | 0.30           |
| PC90ELT11X3-Z     | 11.00±0.20         | 2.01±0.10      | 1.01±0.05      | 0.00±0.20  | 1.00±0.10 | 9.17±0.20  | 2.70±0.10 | 0.40±0.15      | 0.30           |
| PC95ELT11X4-Z     | 11.00±0.20         | 3.01±0.10      | 1.01±0.05      | 8.80±0.20  | 2.00±0.10 | 9.17±0.20  | 2.78±0.10 | 6.40±0.15      | 0.30           |
| PC90ELT11X4-Z     | 11.00±0.20         | 3.01±0.10      | 1.01±0.05      | 0.00±0.20  | 2.00±0.10 | 9.17±0.20  | 2.70±0.10 | 0.40±0.15      | 0.30           |
| PC95ELT13X3.4-Z   | 13.00±0.25         | 2.19±0.10      | 1.19±0.05      | 10.40±0.20 | 1.00±0.10 | 10.83±0.20 | 3.29±0.10 | 7.56±0.15      | 0.30           |
| PC90ELT13X3.4-Z   | 13.00±0.25         | 2.19±0.10      | 1.19±0.05      | 10.40±0.20 | 1.00±0.10 | 10.05±0.20 | 3.29±0.10 | 7.50±0.15      | 0.30           |
| PC95ELT13X4.4-Z   | 13.00±0.25         | 3.19±0.10      | 1.19±0.05      | 10.40±0.20 | 2.00±0.10 | 10.83±0.20 | 3.29±0.10 | 7.56±0.15      | 0.30           |
| PC90ELT13X4.4-Z   | 13.00±0.23         | 3.19±0.10      | 1.1910.03      | 10.4010.20 | 2.00±0.10 | 10.65±0.20 | 3.29±0.10 | 7.50±0.15      | 0.30           |
| PC95ELT15.5X4.3-Z | 15.50±0.30         | 2.92±0.10      | 1.42±0.10      | 12.40±0.25 | 1.50±0.10 | 12.92±0.25 | 3.92±0.10 | 9.01±0.20      | 0.30           |
| PC90ELT15.5X4.3-Z | 15.50±0.50         | 2.32±0.10      | 1.42±0.10      | 12.40±0.25 | 1.50±0.10 | 12.92±0.23 | 3.92±0.10 | 3.01±0.20      | 0.30           |
| PC95ELT15.5X5.8-Z | 15.50±0.30         | 4.42±0.10      | 1.42±0.10      | 12.40±0.25 | 3.00±0.10 | 12.92±0.25 | 3.92±0.10 | 9.01±0.20      | 0.30           |
| PC90ELT15.5X5.8-Z | 15.50±0.50         | 4.42±0.10      | 1.42±0.10      | 12.40±0.25 | 3.00±0.10 | 12.92±0.23 | 3.32±0.10 | 9.01±0.20      | 0.30           |
| PC95ELT18X5.3-Z   | 10.00.0.20         | 2.65 . 0.10    | 1 65 . 0 10    | 14.40+0.05 | 2.00.0.10 | 15 00 0 20 | 4.55±0.10 | 10.47±0.20     | 0.30           |
| PC90ELT18X5.3-Z   | 18.00±0.30         | 3.65±0.10      | 1.65±0.10      | 14.40±0.25 | 2.00±0.10 | 15.00±0.30 | 4.55±0.10 | 10.47±0.20     | 0.30           |

|                   | Effective par                     | ameter  |   |                                     |             |              |           | Electrical charac                                  | teristics       |
|-------------------|-----------------------------------|---|---|-------------------------------------|-------------|--------------|-----------|--|-----------------|
| Part No.(ELH+ELH) | Core factor C1(mm <sup>-1</sup> ) | Effective<br>cross-sectional<br>area<br>Ae(mm²) | Effective<br>magnetic path<br>length<br>ℓ e(mm) | Effective<br>core volume<br>Ve(mm³) | Amin. (mm²) | Acw<br>(mm²) | Weigh (g) | AL-value  (nH/N²) 1kHz 0.5mA 100Ts Without air gap | With air gap    |
| PC95ELT11X3-Z     | 0.700                             | 44.7  | 10.0  | 101                                 | 45.0        | 0.00         |           | 2590±25%   | 50±3%           |
| PC90ELT11X3-Z     | 0.702                             | 11.7  | 16.6  | 194                                 | 15.9        | 3.20         | 1.1       | 1750±25%   | 80±5%<br>125±7% |
| PC95ELT11X4-Z     | 0.826                             | 13.7  | 16.5  | 226                                 | 15.9        | 6.39         | 1.3       | 2400±25%   | 50±3%<br>80±5%  |
| PC90ELT11X4-Z     | 0.020                             | 10.7  | 10.5  | 220                                 | 10.0        | 0.00         | 1.0       | 1700±25%   | 125±7%          |
| PC95ELT13X3.4-Z   | 0.578                             | 13.4  | 23.2  | 312                                 | 22.4        | 3.77         | 1.8       | 3390±25%   | 63±3%<br>100±5% |
| PC90ELT13X3.4-Z   | 0.570                             | 10.4  | 20.2  | 012                                 | 22.7        | 0.77         | 1.0       | 2400±25%   | 160±3%          |
| PC95ELT13X4.4-Z   | 0.667                             | 15.4  | 23.1  | 357                                 | 22.4        | 7.54         | 2.0       | 3160±25%   | 63±3%<br>100±5% |
| PC90ELT13X4.4-Z   | 0.007                             | 10.4  | 20.1  | 007                                 | 22.4        | 7.54         | 2.0       | 2300±25%   | 160±3%          |
| PC95ELT15.5X4.3-Z | 0.503                             | 16.6  | 33.1  | 550                                 | 31.9        | 6.75         | 3.0       | 4340±25%   | 63±3%<br>100+3% |
| PC90ELT15.5X4.3-Z | 0.500                             | 10.0  | 00.1  | 330                                 | 01.0        | 0.70         | 0.0       | 2900±25%   | 160±5%          |
| PC95ELT15.5X5.8-Z | 0.597                             | 19.6  | 32.9  | 646                                 | 31.9        | 13.5         | 3.5       | 3680±25%   | 63±3%<br>100±3% |
| PC90ELT15.5X5.8-Z | 0.007                             | 10.0  | 02.0  | 0-10                                | 01.0        | 10.0         | 0.0       | 2200±25%   | 160±5%          |
| PC95ELT18X5.3-Z   | 0.446                             | 19.8  | 44.5  | 882                                 | 43.0        | 10.5         | 5.0       | 5330±25%   | 80±3%<br>125±3% |
| PC90ELT18X5.3-Z   | 0.440                             | 13.0  | 77.5  | 002                                 | 40.0        | 10.5         | 3.0       | 3500±25%   | 200±5%          |

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## Mn-Zn ELT Cores

### **SHAPES AND DIMENSIONS**





| PC95     | ELT18X7.3      | - | Z                                |
|----------|----------------|---|----------------------------------|
|          |                |   |                                  |
| Material | Size of E core |   | AL-value<br>(Z: without air gap) |

| Part No.(ELH+PLT) | Dimensions<br>(mm) |                |                |            |           |            |            |                |                |
|-------------------|--------------------|----------------|----------------|------------|-----------|------------|------------|----------------|----------------|
|                   | A                  | B <sub>1</sub> | B <sub>2</sub> | С          | D         | E          | F1         | F <sub>2</sub> | R <sub>2</sub> |
| PC95ELT18X7.3-Z   | 18.00±0.30         | 5.65±0.10      | 1.65±0.10      | 14.40±0.25 | 4.00±0.15 | 15.00±0.30 | 4.55±0.10  | 10.47±0.20     | 0.30           |
| PC90ELT18X7.3-Z   | 10.00±0.30         | 3.03±0.10      | 1.05±0.10      | 14.40±0.25 | 4.00±0.15 | 15.00±0.30 | 4.55±0.10  | 10.47±0.20     | 0.30           |
| PC95ELT20X5.7-Z   | 20.00±0.35         | 3.83±0.10      | 1.83±0.10      | 16.00±0.30 | 2.00±0.10 | 16.67±0.30 | 5.06±0.15  | 11.63±0.20     | 0.50           |
| PC90ELT20X5.7-Z   | 20.00±0.35         | 3.03±0.10      | 1.03±0.10      | 10.00±0.30 | 2.00±0.10 | 10.67±0.30 | 5.06±0.15  | 11.03±0.20     | 0.50           |
| PC95ELT20X7.7-Z   | 20.00±0.35         | 5.83±0.15      | 1.83±0.10      | 16.00±0.30 | 4.00±0.15 | 16.67±0.30 | 5.06±0.15  | 11.63±0.20     | 0.50           |
| PC90ELT20X7.7-Z   | 20.00±0.33         | 5.05±0.15      | 1.05±0.10      | 10.00±0.30 | 4.00±0.13 | 10.07±0.30 | 3.00±0.13  | 11.03±0.20     | 0.50           |
| PC95ELT22X6-Z     | 22.00±0.40         | 4.02±0.10      | 2.02±0.10      | 17.60±0.30 | 2.00±0.10 | 18.33±0.35 | 5.56±0.15  | 12.79±0.25     | 0.50           |
| PC90ELT22X6-Z     | 22.00±0.40         | 4.02±0.10      | 2.02±0.10      | 17.00±0.00 | 2.00±0.10 | 10.33±0.33 | 5.56±0.15  | 12.79±0.25     | 0.50           |
| PC95ELT22X8-Z     | 22.00±0.40         | 6.02±0.15      | 2.02±0.10      | 17.60±0.30 | 4.00±0.15 | 18.33±0.35 | 5.56±0.15  | 12.79±0.25     | 0.50           |
| PC90ELT22X8-Z     | 22.00±0.40         | 0.02±0.13      | 2.02±0.10      | 17.00±0.30 | 4.00±0.13 | 10.55±0.55 | 3.30±0.13  | 12.79±0.23     | 0.50           |
| PC95ELT25X6.6-Z   | 25.00±0.45         | 4.29±0.10      | 2.29±0.10      | 20.00±0.35 | 2.00±0.10 | 20.83±0.35 | 6.32±0.15  | 14.54±0.25     | 0.50           |
| PC90ELT25X6.6-Z   | 25.00±0.45         | 4.23±0.10      | 2.29±0.10      | 20.00±0.35 | 2.00±0.10 | 20.03±0.35 | 0.32±0.15  | 14.54±0.25     | 0.50           |
| PC95ELT25X8.6-Z   | 25.00±0.45         | 6.29±0.15      | 2.29±0.10      | 20.00.0.25 | 4.00.0.15 | 20.02.0.25 | 6 22 .0 15 | 14 54 . 0 05   | 0.50           |
| PC90ELT25X8.6-Z   | 25.00±0.45         | 0.29±0.15      | 2.29±0.10      | 20.00±0.35 | 4.00±0.15 | 20.83±0.35 | 6.32±0.15  | 14.54±0.25     | 0.50           |

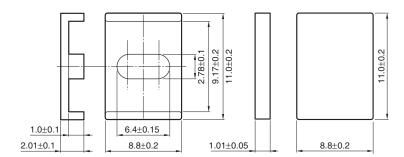
|                   | Effective par         | ameter                         |                                      |                       |       |                    |       | Electrical charac                              | teristics        |
|-------------------|-----------------------|--------------------------------|--------------------------------------|-----------------------|-------|--------------------|-------|--|------------------|
|                   | Core<br>factor        | Effective cross-sectional area | Effective<br>magnetic path<br>length | Effective core volume | Amin. | Acw                | Weigh | AL-value                                       |                  |
| Part No.(ELH+ELH) | C1(mm <sup>-1</sup> ) | Ae(mm²)                        | ℓe(mm)                               | Ve(mm³)               | (mm²) | (mm <sup>2</sup> ) | (g)   | (nH/N <sup>2</sup> )<br>1kHz<br>0.5mA<br>100Ts | Large dia non    |
| PC95ELT18X7.3-Z   |                       |                                |                                      |                       |       |                    |       | Without air gap<br>4760±25%                    | With air gap     |
| PC90ELT18X7.3-Z   | 0.538                 | 23.8                           | 44.3                                 | 1050                  | 43.0  | 20.9               | 6.0   | 3100±25%                                       | 125±3%<br>200±5% |
| PC95ELT20X5.7-Z   | 0.393                 | 21.6                           | 54.9                                 | 1180                  | 52.9  | 11.6               | 6.7   | 6270±25%                                       | 80±3%<br>125±3%  |
| PC90ELT20X5.7-Z   | 0.393                 | 21.0                           | 54.9                                 | 1100                  | 52.9  | 11.0               | 0.7   | 4150±25%                                       | 125±3%<br>200±5% |
| PC95ELT20X7.7-Z   | 0.469                 | 25.6                           | 54.6                                 | 1400                  | 52.9  | 23.2               | 7.8   | 5630±25%                                       | 80±3%<br>125±3%  |
| PC90ELT20X7.7-Z   | 0.409                 | 25.0                           | 54.0                                 | 1400                  | 32.9  | 23.2               | 7.0   | 3900±25%                                       | 200±5%           |
| PC95ELT22X6-Z     | 0.351                 | 23.4                           | 66.6                                 | 1560                  | 64.2  | 12.8               | 9.0   | 7250±25%                                       | 100±3%<br>160±3% |
| PC90ELT22X6-Z     | 0.551                 | 20.4                           | 00.0                                 | 1300                  | 04.2  | 12.0               | 3.0   | 4800±25%                                       | 250±5%           |
| PC95ELT22X8-Z     | 0.413                 | 27.3                           | 66.2                                 | 1810                  | 64.2  | 25.5               | 10    | 6540±25%                                       | 100±3%<br>160±3% |
| PC90ELT22X8-Z     | 0.410                 | 27.0                           | 00.2                                 | 1010                  | 04.2  | 20.0               | 10    | 4250±25%                                       | 250±5%           |
| PC95ELT25X6.6-Z   | 0.302                 | 26.0                           | 86.0                                 | 2230                  | 83.0  | 14.5               | 13    | 8600±25%                                       | 100±3%<br>160±3% |
| PC90ELT25X6.6-Z   | 0.002                 | 20.0                           | 00.0                                 | 2200                  | 00.0  | 14.0               | 10    | 6100±25%                                       | 250±5%           |
| PC95ELT25X8.6-Z   | 0.350                 | 30.0                           | 85.6                                 | 2570                  | 83.0  | 29.0               | 15    | 7540±25%                                       | 100±3%<br>160±3% |
| PC90ELT25X8.6-Z   | 0.000                 | 50.0                           | 00.0                                 | 2010                  | 00.0  | 23.0               | 10    | 5400±25%                                       | 250±5%           |

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## Mn-Zn Planar series Part No.: PC90ELT11X3-Z

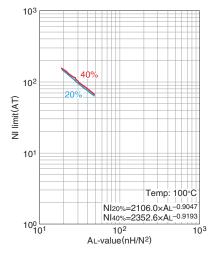
### **SHAPES AND DIMENSIONS**



Dimensions in mm

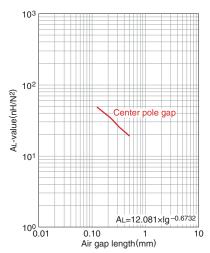
| Effective para      | meter                          |                    |                       |                                 |         | Electrical characteristics |                 |  |
|---------------------|--------------------------------|--------------------|-----------------------|---------------------------------|---------|----------------------------|-----------------|--|
| Core factor         | Effective magnetic path length | cross-sectional    | Effective core volume | Cross-sectional winding area of | Weigh   | AL-value *                 | Core loss       |  |
| C <sub>1</sub>      | ℓe                             | area<br>Ae         | Ve                    | core<br>Acw                     |         |                            |                 |  |
| (mm <sup>-1</sup> ) | (mm)                           | (mm <sup>2</sup> ) | (mm <sup>3</sup> )    | (mm <sup>2</sup> )              | (g/set) | (nH/N <sup>2</sup> )       | (W)max.         |  |
|                     |                                |                    |                       |                                 |         | 1kHz<br>0.5mA              | 100kHz<br>200mT |  |
|                     |                                |                    |                       |                                 |         | 0.01111                    | 100°C           |  |
| 0.702               | 11.7                           | 16.6               | 194                   | 3.20                            | 1.1     | 1750±25%                   | 0.15            |  |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



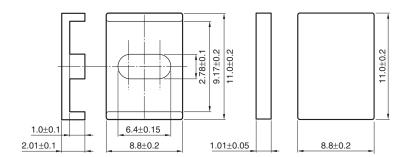
Measuring conditions
• Coil: Ø0.18 2UEW 100Ts
• Frequency: 1kHz

• Current level : 0.5mA • Ambient temperature : 25°C

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

## Mn-Zn Planar series Part No.: PC95ELT11X3-Z

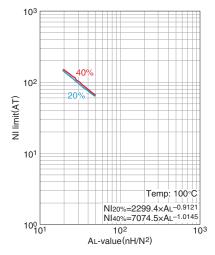
### **SHAPES AND DIMENSIONS**



Dimensions in mm

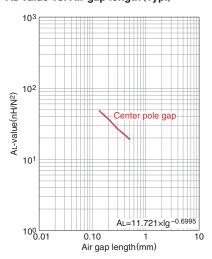
| Effective parai     | neter                          |                                |                       |                                      |         | Electrical characteristics |                 |      |       |
|---------------------|--------------------------------|--------------------------------|-----------------------|--------------------------------------|---------|----------------------------|-----------------|------|-------|
| Core factor         | Effective magnetic path length | Effective cross-sectional area | Effective core volume | Cross-sectional winding area of core | Weigh   | AL-value *                 | Core loss       | ;    |       |
| C <sub>1</sub>      | ℓe                             | Ae                             | Ve                    | Acw                                  |         |                            |                 |      |       |
| (mm <sup>-1</sup> ) | (mm)                           | (mm <sup>2</sup> )             | (mm <sup>3</sup> )    | (mm <sup>2</sup> )                   | (g/set) | (nH/N <sup>2</sup> )       | (W)max.         |      |       |
|                     |                                |                                |                       |                                      |         | 1kHz<br>0.5mA              | 100kHz<br>200mT |      |       |
|                     |                                |                                |                       |                                      |         | U.JIIA                     | 25°C            | 80°C | 120°C |
| 0.702               | 11.7                           | 16.6                           | 194                   | 3.20                                 | 1.1     | 2590±25%                   | 0.14            | 0.12 | 0.14  |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



Measuring conditions
• Coil: ø0.18 2UEW 100Ts
• Frequency: 1kHz

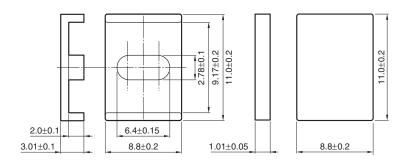
• Current level : 0.5mA • Ambient temperature : 25°C

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.



## Mn-Zn Planar series Part No.: PC90ELT11X4-Z

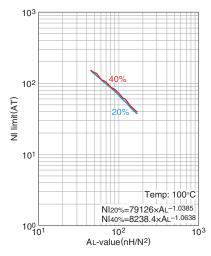
### **SHAPES AND DIMENSIONS**



Dimensions in mm

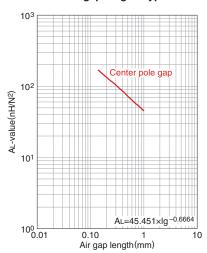
| Effective para      | meter                          |                 |                       |                                 |         | Electrical characteristics |                 |  |
|---------------------|--------------------------------|-----------------|-----------------------|---------------------------------|---------|----------------------------|-----------------|--|
| Core<br>factor      | Effective magnetic path length | cross-sectional | Effective core volume | Cross-sectional winding area of | Weigh   | AL-value *                 | Core loss       |  |
| C1                  | ℓe                             | area<br>Ae      | Ve                    | Acw                             |         |                            |                 |  |
| (mm <sup>-1</sup> ) | (mm)                           | (mm²)           | (mm <sup>3</sup> )    | (mm <sup>2</sup> )              | (g/set) | (nH/N <sup>2</sup> )       | (W)max.         |  |
|                     |                                |                 |                       |                                 |         | 1kHz<br>0.5mA              | 100kHz<br>200mT |  |
|                     |                                |                 |                       |                                 |         |                            | 100°C           |  |
| 0.826               | 13.7                           | 16.5            | 226                   | 6.39                            | 1.3     | 1700±25%                   | 0.18            |  |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



Measuring conditions

• Coil: Ø0.18 2UEW 100Ts

• Frequency: 1kHz

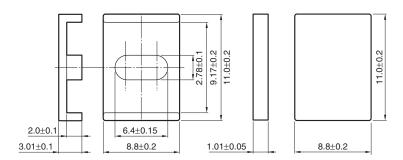
• Current level : 0.5mA

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.



## Mn-Zn Planar series Part No.: PC95ELT11X4-Z

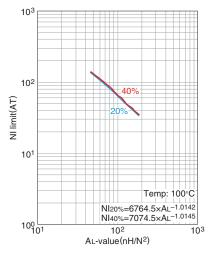
### **SHAPES AND DIMENSIONS**



Dimensions in mm

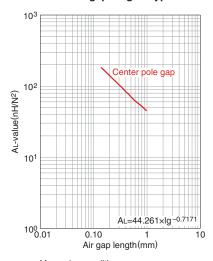
| Effective par       | ameter                         |                    |                       |                                 |         | Electrical characteristics |                 |      |       |
|---------------------|--------------------------------|--------------------|-----------------------|---------------------------------|---------|----------------------------|-----------------|------|-------|
| Core<br>factor      | Effective magnetic path length | cross-sectional    | Effective core volume | Cross-sectional winding area of | Weigh   | AL-value *                 | Core loss       | 5    |       |
| C <sub>1</sub>      | ℓe                             | area<br>Ae         | Ve                    | Acw                             |         |                            |                 |      |       |
| (mm <sup>-1</sup> ) | (mm)                           | (mm <sup>2</sup> ) | (mm <sup>3</sup> )    | (mm <sup>2</sup> )              | (g/set) | (nH/N <sup>2</sup> )       | (W)max.         |      |       |
|                     |                                |                    |                       |                                 |         | 1kHz<br>0.5mA              | 100kHz<br>200mT |      |       |
|                     |                                |                    |                       |                                 |         |                            | 25°C            | 80°C | 120°C |
| 0.826               | 13.7                           | 16.5               | 226                   | 6.39                            | 1.3     | 2400±25%                   | 0.16            | 0.15 | 0.16  |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



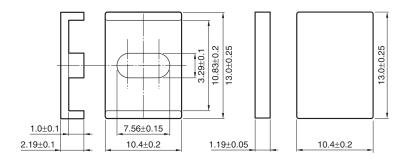
Measuring conditions
• Coil: Ø0.18 2UEW 100Ts
• Frequency: 1kHz

• Current level : 0.5mA

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

## Mn-Zn Planar series Part No.: PC90ELT13X3.4-Z

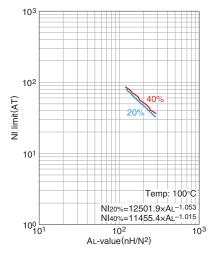
### **SHAPES AND DIMENSIONS**



Dimensions in mm

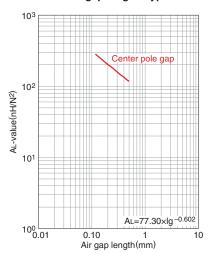
| Effective parai     | meter                          |                    |                       |                                 |         | Electrical characteristics |                   |  |
|---------------------|--------------------------------|--------------------|-----------------------|---------------------------------|---------|----------------------------|-------------------|--|
| Core factor         | Effective magnetic path length | cross-sectional    | Effective core volume | Cross-sectional winding area of | Weigh   | AL-value *                 | Core loss         |  |
| C1                  | ℓe                             | Ae                 | Ve                    | Acw                             |         |                            |                   |  |
| (mm <sup>-1</sup> ) | (mm)                           | (mm <sup>2</sup> ) | (mm <sup>3</sup> )    | (mm <sup>2</sup> )              | (g/set) | (nH/N²)<br>1kHz            | (W)max.<br>100kHz |  |
|                     |                                |                    |                       |                                 |         | 0.5mA                      | 200mT             |  |
|                     |                                |                    |                       |                                 |         |                            | 100°C             |  |
| 0.578               | 13.4                           | 23.2               | 312                   | 3.77                            | 1.8     | 2400±25%                   | 0.3               |  |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



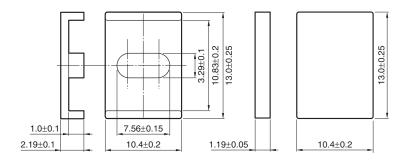
Measuring conditions
• Coil: Ø0.18 2UEW 100Ts
• Frequency: 1kHz

• Current level : 0.5mA

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

## Mn-Zn Planar series Part No.: PC95ELT13X3.4-Z

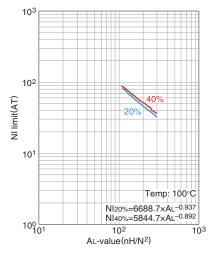
### **SHAPES AND DIMENSIONS**



Dimensions in mm

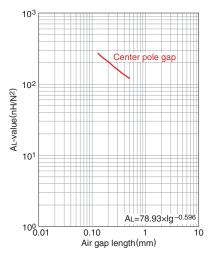
| Effective para      | ameter                         |                                |                       |                                      |         | Electrical characteristics |                 |      |       |
|---------------------|--------------------------------|--------------------------------|-----------------------|--------------------------------------|---------|----------------------------|-----------------|------|-------|
| Core factor         | Effective magnetic path length | Effective cross-sectional area | Effective core volume | Cross-sectional winding area of core | Weigh   | AL-value *                 | Core loss       | \$   |       |
| C <sub>1</sub>      | ℓe                             | Ae                             | Ve                    | Acw                                  |         |                            |                 |      |       |
| (mm <sup>-1</sup> ) | (mm)                           | (mm <sup>2</sup> )             | (mm <sup>3</sup> )    | (mm <sup>2</sup> )                   | (g/set) | (nH/N <sup>2</sup> )       | (W)max.         |      |       |
|                     |                                |                                |                       |                                      |         | 1kHz<br>0.5mA              | 100kHz<br>200mT |      |       |
|                     |                                |                                |                       |                                      |         |                            | 25°C            | 80°C | 120°C |
| 0.578               | 13.4                           | 23.2                           | 312                   | 3.77                                 | 1.8     | 3390±25%                   | 0.3             | 0.28 | 0.3   |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)

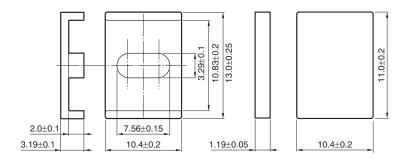


Measuring conditions
• Coil : Ø0.18 2UEW 100Ts
• Frequency : 1kHz
• Current level : 0.5mA
• Ambient temperature : 25°C

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

## Mn-Zn Planar series Part No.: PC90ELT13X4.4-Z

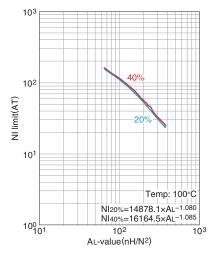
### **SHAPES AND DIMENSIONS**



Dimensions in mm

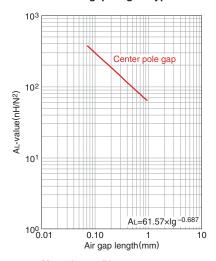
| Effective para      | meter                          | Electrical characteristics |                       |                                 |         |                      |                 |
|---------------------|--------------------------------|----------------------------|-----------------------|---------------------------------|---------|----------------------|-----------------|
| Core<br>factor      | Effective magnetic path length | cross-sectional            | Effective core volume | Cross-sectional winding area of | Weigh   | AL-value *           | Core loss       |
| C1                  | ℓe                             | area<br>Ae                 | Ve                    | Acw                             |         |                      |                 |
| (mm <sup>-1</sup> ) | (mm)                           | (mm <sup>2</sup> )         | (mm <sup>3</sup> )    | (mm <sup>2</sup> )              | (g/set) | (nH/N <sup>2</sup> ) | (W)max.         |
|                     |                                |                            |                       |                                 |         | 1kHz<br>0.5mA        | 100kHz<br>200mT |
|                     |                                |                            |                       |                                 |         |                      | 100°C           |
| 0.667               | 15.4                           | 23.1                       | 357                   | 7.54                            | 2.0     | 2300±25%             | 0.3             |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



Measuring conditions

• Coil: Ø0.18 2UEW 100Ts

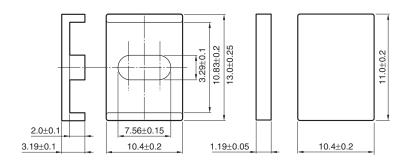
• Frequency: 1kHz

• Current level : 0.5mA

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

## Mn-Zn Planar series Part No.: PC95ELT13X4.4-Z

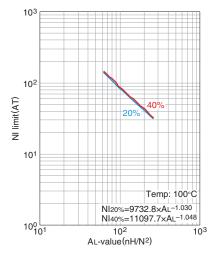
### **SHAPES AND DIMENSIONS**



Dimensions in mm

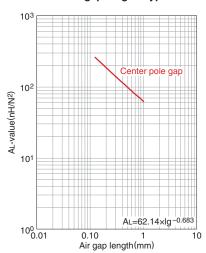
| Effective parameter |                                |                    |                       |                                 |         | Electrical characteristics |                 |      |       |
|---------------------|--------------------------------|--------------------|-----------------------|---------------------------------|---------|----------------------------|-----------------|------|-------|
| Core factor         | Effective magnetic path length | cross-sectional    | Effective core volume | Cross-sectional winding area of | Weigh   | AL-value *                 | Core loss       |      |       |
| C <sub>1</sub>      | ℓe                             | area<br>Ae         | Ve                    | Acw                             |         |                            |                 |      |       |
| (mm <sup>-1</sup> ) | (mm)                           | (mm <sup>2</sup> ) | (mm <sup>3</sup> )    | (mm <sup>2</sup> )              | (g/set) | (nH/N <sup>2</sup> )       | (W)max.         |      |       |
|                     |                                |                    |                       |                                 |         | 1kHz<br>0.5mA              | 100kHz<br>200mT |      |       |
|                     |                                |                    |                       |                                 |         |                            | 25°C            | 80°C | 120°C |
| 0.667               | 15.4                           | 23.1               | 357                   | 7.54                            | 2.0     | 3160±25%                   | 0.3             | 0.28 | 0.3   |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



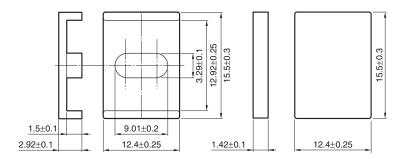
Measuring conditions

- Coil: ø0.18 2UEW 100Ts
- Frequency: 1kHz
- Current level : 0.5mA
- Ambient temperature: 25°C

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

# Mn-Zn Planar series Part No.: PC90ELT15.5X4.3-Z

### **SHAPES AND DIMENSIONS**



| Effective parameter |                                |                                |                       |                                      |         |                          | Electrical characteristics |  |  |
|---------------------|--------------------------------|--------------------------------|-----------------------|--------------------------------------|---------|--------------------------|----------------------------|--|--|
| Core<br>factor      | Effective magnetic path length | Effective cross-sectional area | Effective core volume | Cross-sectional winding area of core | Weigh   | AL-value *               | Core loss                  |  |  |
| C1                  | ℓe                             | Ae                             | Ve                    | Acw                                  |         |                          |                            |  |  |
| (mm <sup>-1</sup> ) | (mm)                           | (mm²)                          | (mm <sup>3</sup> )    | (mm²)                                | (g/set) | (nH/N²)<br>1kHz<br>0.5mA | (W)max.<br>100kHz<br>200mT |  |  |

3.0

Dimensions in mm

2900±25%

0.5

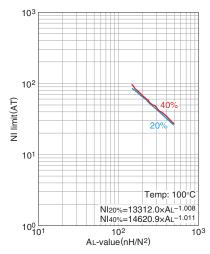
### NI limit vs. AL-value (Typ.)

16.6

33.1

550

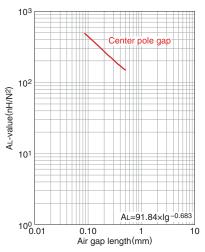
0.503



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)

6.75



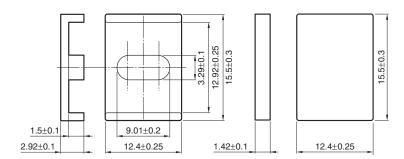
Measuring conditions

- Coil: Ø0.18 2UEW 100Ts
- Frequency: 1kHz
- Current level : 0.5mA
- Ambient temperature : 25°C

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

# Mn-Zn Planar series Part No.: PC95ELT15.5X4.3-Z

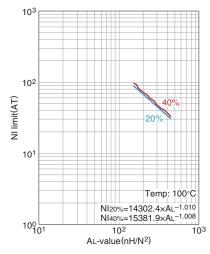
### **SHAPES AND DIMENSIONS**



Dimensions in mm

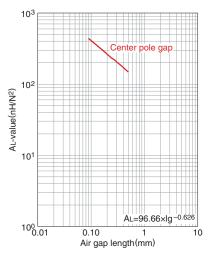
| Effective para      | Electrical characteristics     |                                |                       |                                      |         |                      |                 |      |       |
|---------------------|--------------------------------|--------------------------------|-----------------------|--------------------------------------|---------|----------------------|-----------------|------|-------|
| Core factor         | Effective magnetic path length | Effective cross-sectional area | Effective core volume | Cross-sectional winding area of core | Weigh   | AL-value *           | Core loss       |      |       |
| C <sub>1</sub>      | ℓe                             | Ae                             | Ve                    | Acw                                  |         |                      |                 |      |       |
| (mm <sup>-1</sup> ) | (mm)                           | (mm <sup>2</sup> )             | (mm <sup>3</sup> )    | (mm <sup>2</sup> )                   | (g/set) | (nH/N <sup>2</sup> ) | (W)max.         |      |       |
|                     |                                |                                |                       |                                      |         | 1kHz<br>0.5mA        | 100kHz<br>200mT |      |       |
|                     |                                |                                |                       |                                      |         |                      | 25°C            | 80°C | 120°C |
| 0.503               | 16.6                           | 33.1                           | 550                   | 6.75                                 | 3.0     | 4340±25%             | 0.5             | 0.45 | 0.5   |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial ALvalue has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



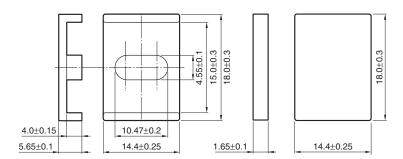
Measuring conditions
• Coil: ø0.18 2UEW 100Ts • Frequency : 1kHz

• Current level : 0.5mA

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

## Mn-Zn Planar series Part No.: PC90ELT18X7.3-Z

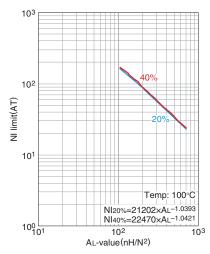
### **SHAPES AND DIMENSIONS**



Dimensions in mm

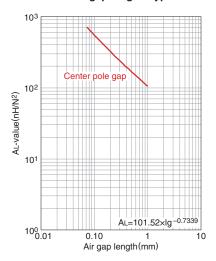
| Effective parai     | meter                          | Electrical characteristics |                       |                                 |         |                      |                 |
|---------------------|--------------------------------|----------------------------|-----------------------|---------------------------------|---------|----------------------|-----------------|
| Core factor         | Effective magnetic path length | cross-sectional            | Effective core volume | Cross-sectional winding area of | Weigh   | AL-value *           | Core loss       |
| C1                  | ℓe                             | area<br>Ae                 | Ve                    | Acw                             |         |                      |                 |
| (mm <sup>-1</sup> ) | (mm)                           | (mm <sup>2</sup> )         | (mm <sup>3</sup> )    | (mm <sup>2</sup> )              | (g/set) | (nH/N <sup>2</sup> ) | (W)max.         |
|                     |                                |                            |                       |                                 |         | 1kHz<br>0.5mA        | 100kHz<br>200mT |
|                     |                                |                            |                       |                                 |         |                      | 100°C           |
| 0.538               | 23.8                           | 44.3                       | 1050                  | 20.9                            | 6.0     | 3100±25%             | 0.7             |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



Measuring conditions

• Coil: Ø0.18 2UEW 100Ts

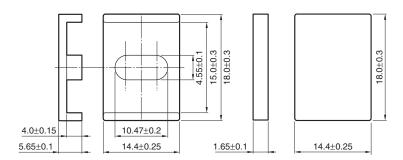
• Frequency : 1kHz

• Current level : 0.5mA

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

## Mn-Zn Planar series Part No.: PC95ELT18X7.3-Z

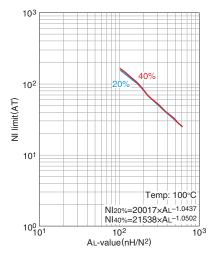
### **SHAPES AND DIMENSIONS**



Dimensions in mm

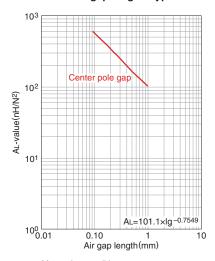
| Effective parameter |                                |                    |                       |                                 |         | Electrical characteristics |                 |      |       |
|---------------------|--------------------------------|--------------------|-----------------------|---------------------------------|---------|----------------------------|-----------------|------|-------|
| Core factor         | Effective magnetic path length | cross-sectional    | Effective core volume | Cross-sectional winding area of | Weigh   | AL-value *                 | Core loss       |      |       |
| C <sub>1</sub>      | ℓe                             | Ae                 | Ve                    | Acw                             |         |                            |                 |      |       |
| (mm <sup>-1</sup> ) | (mm)                           | (mm <sup>2</sup> ) | (mm <sup>3</sup> )    | (mm <sup>2</sup> )              | (g/set) | (nH/N <sup>2</sup> )       | (W)max.         |      |       |
|                     |                                |                    |                       |                                 |         | 1kHz<br>0.5mA              | 100kHz<br>200mT |      |       |
|                     |                                |                    |                       |                                 |         |                            | 25°C            | 80°C | 120°C |
| 0.538               | 23.8                           | 44.3               | 1050                  | 20.9                            | 6.0     | 4760±25%                   | 0.6             | 0.55 | 0.6   |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



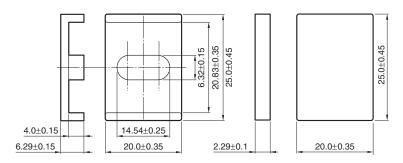
Measuring conditions

- Coil: ø0.18 2UEW 100Ts
- Frequency: 1kHz
- Current level : 0.5mA
- Ambient temperature: 25°C

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

## Mn-Zn Planar series Part No.: PC90ELT25X8.6-Z

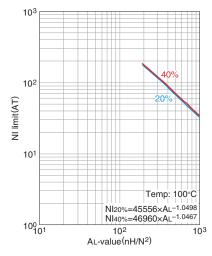
### **SHAPES AND DIMENSIONS**



Dimensions in mm

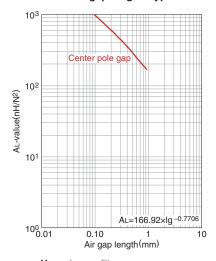
| Effective para      | meter                          | Electrical characteristics |                       |                                 |         |                      |                 |
|---------------------|--------------------------------|----------------------------|-----------------------|---------------------------------|---------|----------------------|-----------------|
| Core<br>factor      | Effective magnetic path length | cross-sectional            | Effective core volume | Cross-sectional winding area of | Weigh   | AL-value *           | Core loss       |
| C <sub>1</sub>      | ℓe                             | area<br>Ae                 | Ve                    | Acw                             |         |                      |                 |
| (mm <sup>-1</sup> ) | (mm)                           | (mm²)                      | (mm <sup>3</sup> )    | (mm <sup>2</sup> )              | (g/set) | (nH/N <sup>2</sup> ) | (W)max.         |
|                     |                                |                            |                       |                                 |         | 1kHz<br>0.5mA        | 100kHz<br>200mT |
|                     |                                |                            |                       |                                 |         |                      | 100°C           |
| 0.350               | 30.0                           | 85.6                       | 2570                  | 29.0                            | 15      | 5400±25%             | 1.8             |

### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)

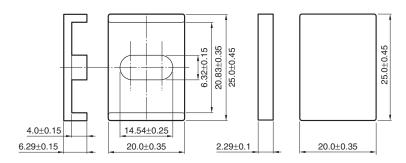


Measuring conditions
• Coil : Ø0.18 2UEW 100Ts
• Frequency : 1kHz
• Current level : 0.5mA
• Ambient temperature : 25°C

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

## Mn-Zn Planar series Part No.: PC95ELT25X8.6-Z

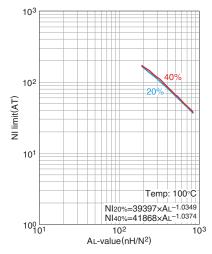
### **SHAPES AND DIMENSIONS**



Dimensions in mm

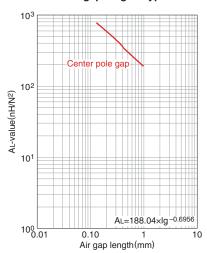
| Effective paran     | Electrical characteristics     |       |                       |                                      |         |                          |   |           |       |
|---------------------|--------------------------------|-------|-----------------------|--------------------------------------|---------|--------------------------|---|-----------|-------|
| Core<br>factor      | Effective magnetic path length |       | Effective core volume | Cross-sectional winding area of core | Weigh   | AL-value *               | Core loss                                     | Core loss |       |
| C <sub>1</sub>      | ℓe                             | Ae    | Ve                    | Acw                                  |         |                          |   |           |       |
| (mm <sup>-1</sup> ) | (mm)                           | (mm²) | (mm <sup>3</sup> )    | (mm²)                                | (g/set) | (nH/N²)<br>1kHz<br>0.5mA | (W)max.<br>100kHz<br>200mT<br>25°C 80°C 120°C |           | 120°C |
| 0.350               | 30.0                           | 85.6  | 2570                  | 29.0                                 | 15      | 7540±25%                 | 1.6   | 1.5       | 1.6   |

#### NI limit vs. AL-value (Typ.)



The 20% and 40% graph shows when a 20% and 40% drop from the initial AL-value has been made due to the DC superimposition.

### AL-value vs. Air gap length (Typ.)



Measuring conditions
• Coil: Ø0.18 2UEW 100Ts
• Frequency: 1kHz
• Current level: 0.5mA

Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.