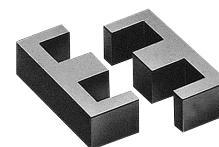
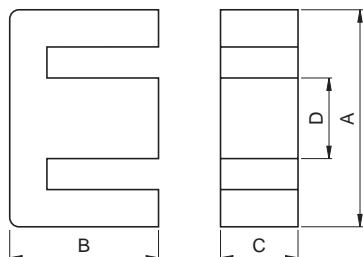


# Ferrite Cores

For Power Supply  
EE, EF Cores

## EE, EF Series

### CORE SHAPES AND DIMENSIONS/CHARACTERISTICS



| Type        | Dimensions (mm) |            |            |             | Ae<br>(mm <sup>2</sup> ) | le<br>(mm) | Weight<br>(g) |
|-------------|-----------------|------------|------------|-------------|--------------------------|------------|---------------|
|             | A               | B          | C          | D           |                          |            |               |
| EE8         | 8.3±0.2         | 4±0.1      | 3.6±0.2    | 1.85±0.15   | 7                        | 19.2       | 0.7           |
| EE10/11     | 10.2±0.2        | 5.5±0.1    | 4.75±0.15  | 2.45±0.15   | 12.1                     | 26.1       | 1.5           |
| EF12.6      | 12.7±0.4        | 6.4±0.1    | 3.6±0.2    | 3.65±0.15   | 13                       | 29.6       | 2             |
| EE13        | 13±0.2          | 6±0.15     | 6.15±0.15  | 2.75±0.15   | 17.1                     | 30.2       | 2.7           |
| EE16        | 16±0.3          | 7.2±0.1    | 4.8±0.2    | 4±0.2       | 19.2                     | 35         | 3.3           |
| SEE16       | 16±0.3          | 7.15±0.15  | 6.8±0.2    | 3.175±0.175 | 21.7                     | 36.6       | 4.1           |
| EF16        | 16.1±0.6        | 8.05±0.15  | 4.5±0.2    | 4.55±0.15   | 20.1                     | 37.6       | 3.9           |
| EE19        | 19.1±0.3        | 7.95±0.15  | 5±0.2      | 4.55±0.15   | 23                       | 39.4       | 4.8           |
| EE19/16     | 19.29±0.32      | 8.1±0.18   | 4.75±0.13  | 4.75±0.08   | 22.4                     | 39.1       | 4.8           |
| EE20/20/5   | 20.15±0.55      | 10±0.2     | 5.1±0.2    | 5±0.2       | 31                       | 43         | 7.5           |
| EF20        | 20±0.4          | 9.9±0.2    | 5.65±0.25  | 5.7±0.2     | 33.5                     | 44.9       | 7.4           |
| EE22        | 22±0.3          | 9.35±0.15  | 5.75±0.25  | 5.75±0.25   | 41                       | 39.6       | 8.8           |
| EE25/19     | 25.4±0.5        | 9.46±0.19  | 6.29±0.19  | 6.35±0.25   | 40                       | 48.7       | 9.1           |
| EF25        | 25.05±0.75      | 12.55±0.25 | 7.2±0.3    | 7.25±0.25   | 51.8                     | 57.8       | 15            |
| EE25.4      | 25.4±0.76       | 9.66±0.15  | 6.35±0.25  | 6.35±0.25   | 40.3                     | 48.7       | 10            |
| EE30        | 30±0.5          | 13.15±0.15 | 10.7±0.3   | 10.7±0.3    | 109                      | 57.7       | 32            |
| EE30/30/7   | 30.1±0.7        | 15±0.2     | 7.05±0.25  | 6.95±0.25   | 59.7                     | 66.9       | 22            |
| EF32        | 32.1±0.8        | 16.1±0.3   | 9.15±0.35  | 9.2±0.3     | 83.2                     | 74.3       | 32            |
| EE35        | 34.54±1         | 14.33±0.35 | 9.53±0.38  | 9.39±0.27   | 89.4                     | 69.2       | 33            |
| EE35/28B    | 34.6±0.5        | 14.27±0.3  | 9.31±0.3   | 9.4±0.3     | 84.9                     | 69.6       | 28            |
| EE40        | 40±0.5          | 17±0.3     | 10.7±0.3   | 10.7±0.3    | 127                      | 77         | 50            |
| EE41/33C    | 41.07±0.81      | 16.78±0.13 | 12.57±0.38 | 12.64±0.25  | 156.7                    | 77.6       | 64            |
| EE42/42/15  | 42.15±0.85      | 21±0.2     | 14.95±0.25 | 11.95±0.25  | 182                      | 97         | 80            |
| EE42/42/20  | 42.15±0.85      | 21±0.2     | 19.7±0.3   | 11.95±0.25  | 235                      | 97.4       | 116           |
| EE47/39     | 47.12±0.76      | 19.63±0.2  | 15.62±0.25 | 15.62±0.25  | 242                      | 90.6       | 108           |
| EE50        | 50±0.7          | 21.3±0.3   | 14.6±0.4   | 14.6±0.4    | 226                      | 95.8       | 116           |
| EE50.3/51/6 | 50.3±0.8        | 25.6±0.25  | 6.1±0.2    | 19.9±0.35   | 121                      | 105        | 68            |
| EE55/55/21  | 55.15±1.05      | 27.5±0.3   | 20.7±0.3   | 16.95±0.25  | 354                      | 123        | 234           |
| EE57/47     | 56.57±1         | 23.6±0.23  | 18.8±0.25  | 18.8±0.25   | 344                      | 102        | 190           |
| EE60        | 60±0.8          | 22.3±0.3   | 15.6±0.4   | 15.6±0.4    | 247                      | 110        | 135           |
| EE62.3/62/6 | 62.3±1.2        | 31±0.25    | 6.1±0.2    | 25.3±0.5    | 153                      | 126        | 102           |

# Ferrite Cores

## For Power Supply

### EE, EF Cores

## EE, EF Series

### ELECTRICAL CHARACTERISTICS

#### WITHOUT AIR GAP

| Part No.          | AL-value*<br>(nH/N <sup>2</sup> )<br>[1kHz, 0.5mA, 100Ts] | Calculated out-<br>put power*<br>(W)<br>[100kHz] |
|-------------------|---|--|
| PC40EE8-Z         | 610±25%   |  |
| PC40EE10/11-Z     | 850±25%   | 9.4  |
| PC40EF12.6-Z      | 810±25%   |  |
| PC40EE13-Z        | 1130±25%  | 17   |
| PC40EE16-Z        | 1140±25%  |  |
| PC40SEE16-Z       | 1240±25%  | 32   |
| PC40EF16-Z        | 1100±25%  |  |
| PC40EE19-Z        | 1250±25%  |  |
| H5C2EE19/16-Z     | 5830±30%  |  |
| PC40EE19/16-Z     | 1350±25%  |  |
| PC40EE20/20/5-Z   | 1460±25%  | 41   |
| PC40EF20-Z        | 1570±25%  |  |
| PC40EE22-Z        | 2180±25%  |  |
| H5C2EE25/19-Z     | 8520±30%  |  |
| PC40EE25/19-Z     | 2000±25%  | 70   |
| PC40EF25-Z        | 2000±25%  |  |
| PC40EE25.4-Z      | 2000±25%  |  |
| PC40EE30-Z        | 4690±25%  |  |
| PC40EE30/30/7-Z   | 2100±25%  | 133  |
| PC40EF32-Z        | 2590±25%  |  |
| PC40EF35-Z        | 3170±25%  |  |
| PC40EE35/28B-Z    | 2950±25%  |  |
| PC40EE40-Z        | 4150±25%  |  |
| PC40EE41/33C-Z    | 5060±25%  |  |
| PC40EE42/42/15-Z  | 4700±25%  | 419  |
| PC40EE42/42/20-Z  | 6100±25%  |  |
| PC40EE47/39-Z     | 6660±25%  |  |
| PC40EE50-Z        | 6110±25%  |  |
| PC40EE50.3/51/6-Z | 2900±25%  | 213  |
| PC40EE55/55/21-Z  | 7100±25%  | 814  |
| PC40EE57/47-Z     | 8530±25%  |  |
| PC40EE60-Z        | 5670±25%  |  |
| PC40EE62.3/62/6-Z | 3100±25%  | 250  |

\*The values were obtained with forward converter mode.

#### WITH AIR GAP

| Part No.            | AL-value<br>(nH/N <sup>2</sup> )<br>[1kHz, 0.5mA, 100Ts] |
|---------------------|--|
| PC40EE8AXXX*        | 40±7%, 63±10%  |
| PC40EE10/11AXXX     | 40±7%, 63±10%  |
| PC40EF12.6AXXX      | 63±7%, 100±10%   |
| PC40EE13AXXX        | 63±7%, 100±10%   |
| PC40EE16AXXX        | 80±7%, 160±10%   |
| PC40SEE16AXXX       | 80±7%, 160±10%   |
| PC40EF16AXXX        | 63±7%, 100±10%   |
| PC40EE19AXXX        | 80±7%, 160±10%   |
| PC40EE19/16AXXX     | 80±7%, 160±10%   |
| PC40EE20/20/5AXXX   | 100±7%, 160±10%  |
| PC40EF20AXXX        | 100±7%, 160±10%  |
| PC40EE22AXXX        | 125±7%, 250±10%  |
| PC40EE25/19AXXX     | 100±7%, 200±10%  |
| PC40EF25AXXX        | 100±7%, 160±10%  |
| PC40EE25.4AXXX      | 125±7%, 250±10%  |
| PC40EE30AXXX        | 200±5%, 400±7%   |
| PC40EE30/30/7AXXX   | 160±5%, 250±7%   |
| PC40EF32AXXX        | 160±5%, 250±7%   |
| PC40EE35AXXX        | 200±5%, 400±7%   |
| PC40EE35/28BAXXX    | 200±5%, 400±7%   |
| PC40EE40AXXX        | 200±5%, 400±7%   |
| PC40EE41/33CAXXX    | 200±5%, 400±7%   |
| PC40EE42/42/15AXXX  | 250±5%, 400±7%   |
| PC40EE42/42/20AXXX  | 250±5%, 400±7%   |
| PC40EE47/39AXXX     | 250±5%, 400±7%   |
| PC40EE50AXXX        | 250±5%, 500±7%   |
| PC40EE50.3/51/6AXXX | 200±5%, 400±7%   |
| PC40EE55/55/21AXXX  | 250±5%, 400±7%   |
| PC40EE57/47AXXX     | 250±5%, 400±7%   |
| PC40EE60AXXX        | 250±5%, 500±7%   |
| PC40EE62.3/62/6AXXX | 200±5%, 400±7%   |

\*XXX: AL-value

# Ferrite Cores

## For Power Supply

### EE, EF Cores

## EE, EF Series

### EE BOBBINS

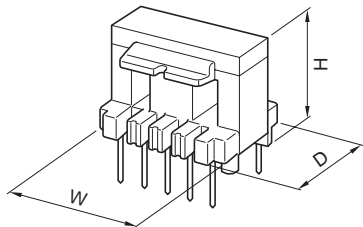


Fig. 1

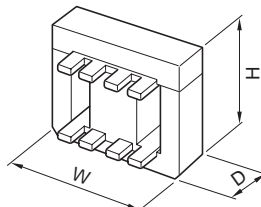


Fig. 2

#### WITH PIN TERMINAL (Fig. 1)

| Part No.             | No. of pin terminal | Dimensions (mm) |      |      | Clamp            |
|----------------------|---------------------|-----------------|------|------|------------------|
|                      |                     | W               | D    | H    |                  |
| BE-8-116CPH          | 6                   | 8.3             | 8    | 8    |                  |
| BE-10-118CPS         | 8                   | 10.4            | 10.2 | 11.2 |                  |
| BE-13-1110CPS        | 10                  | 13.2            | 12.7 | 12.3 |                  |
| BE-16-116CP          | 6                   | 16.3            | 13.1 | 14.6 |                  |
| BE-16-1110CPN        | 10                  | 16.3            | 13.1 | 15.6 |                  |
| BE-16-118CPH         | 8                   | 16.5            | 14.6 | 13.6 |                  |
| BES-16-1110CPS       | 10                  | 16.3            | 14.1 | 16.3 |                  |
| BE-19-116CP          | 6                   | 20.3            | 16.7 | 16.2 |                  |
| BE-19-118CPH         | 8                   | 20.3            | 16.2 | 18.8 |                  |
| BE-22-118CP          | 8                   | 22.3            | 17.1 | 20.1 |                  |
| BE-30-1110CP         | 10                  | 30.4            | 25.1 | 28.6 | FE-30-F          |
| BE-30-1112CP         | 12                  | 30.4            | 25.1 | 28.6 | FE-30-G          |
| BE-40-1112CP         | 12                  | 40.5            | 30.2 | 35.8 | FE-40-F, FE-40-G |
| BE-40-1112CPN        | 12                  | 40.5            | 30.2 | 35.7 |                  |
| BE-50-1112CP         | 12                  | 50.7            | 36.2 | 43.6 | FE-50-F, FE-50-G |
| BE-50.3/51/6-1112CPH | 12                  | 52              | 77   | 16.2 |                  |
| BE-60-1112CP         | 12                  | 60.8            | 45.2 | 45.1 | FE-60-F, FE-60-G |
| BE-62.3/62/6-1112CPH | 12                  | 64              | 88   | 16.2 |                  |

• Material: FR phenol, UL Grade: 94V-0, Pin material: Steel wire (Solder plated)

#### WITHOUT PIN TERMINAL (Fig. 2)

| Part No.   | Dimensions (mm) |      |      | Material [UL Grade] | Clamp            |
|------------|-----------------|------|------|---------------------|------------------|
|            | W               | D    | H    |                     |                  |
| BE-19-5116 | 20.3            | 14.9 | 16.2 | 6-Nylon[94V-0]      |                  |
| BE-22-5116 | 22.3            | 13.1 | 19.5 | 6-Nylon[94V-0]      |                  |
| BE-25-5116 | 25.8            | 19.2 | 18.7 | 6-Nylon[94V-0]      |                  |
| BE-30-5112 | 30.4            | 21.1 | 27.2 | 6-Nylon[94V-0]      | FE-30-F, FE-30-G |
| BE-40-5112 | 40.5            | 29.4 | 35.3 | 6-Nylon[94V-0]      | FE-40-F, FE-40-G |
| BE-50-5112 | 50.7            | 35.8 | 43   | 6-Nylon[94V-0]      | FE-50-F, FE-50-G |
| BE-60-5112 | 60.8            | 46   | 45   | 6-Nylon[94V-0]      | FE-60-F, FE-60-G |

• Material: 6-Nylon, UL Grade: 94V-0