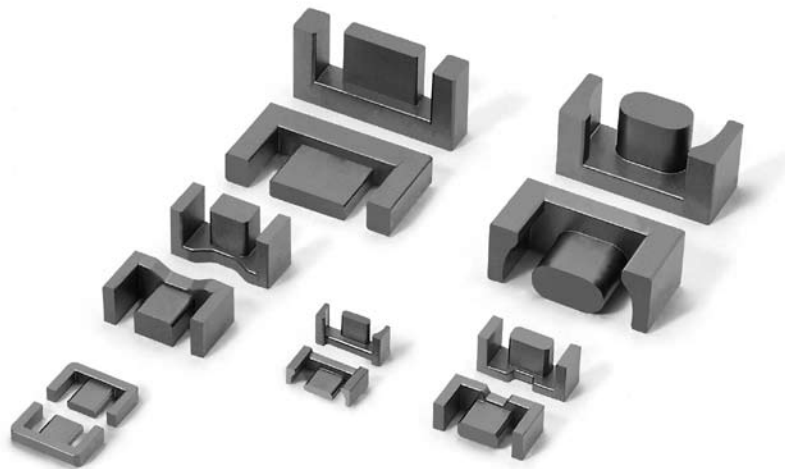


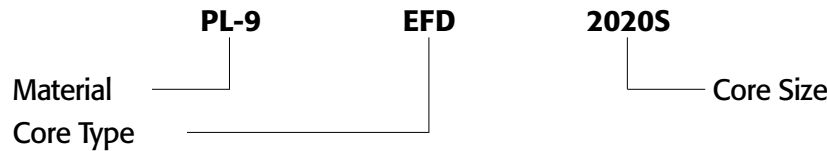


# LOW PROFILE CORES

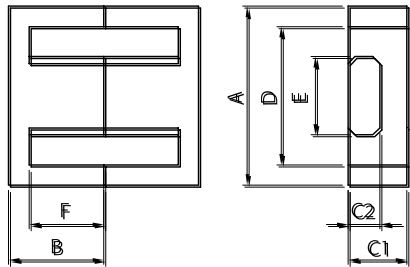
EFD13~EFD50

EPC13~EPC50

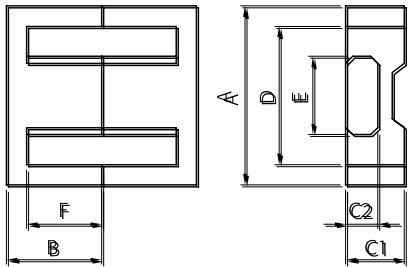
Ordering Code System



## EFD CORES



EFD - ③



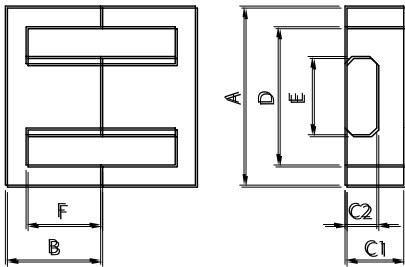
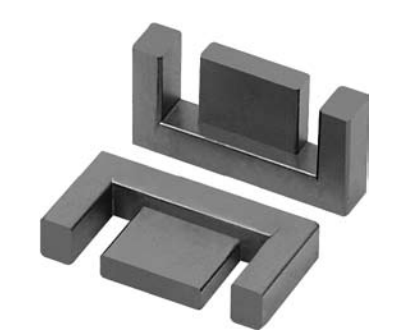
EFD - ④

| Part No.                                     |                       |       | EFD1322N    | EFD1515S    | EFD1618S    | EFD1715S                               |
|----------------------------------------------|-----------------------|-------|-------------|-------------|-------------|----------------------------------------|
| Type                                         |                       |       | EFD - ㉓     | EFD - ㉔     | EFD - ㉕     | EFD - ㉖                                |
| Dimensions in mm                             | A                     |       | 13.40 ±0.30 | 15.00 ±0.40 | 16.40 ±0.30 | 16.90 ±0.30                            |
|                                              | B                     |       | 11.20 ±0.15 | 7.50 ±0.15  | 9.00 ±0.20  | 7.60 ±0.20                             |
|                                              | C1                    |       | 4.50 ±0.15  | 7.50 ±0.15  | 4.50 ±0.15  | 5.50 ±0.20                             |
|                                              | C2                    |       | 3.00 ±0.10  | 2.40 ±0.10  | 2.35 ±0.10  | 2.90 <sup>+0.05</sup> <sub>-0.15</sub> |
|                                              | D                     |       | 9.80 ±0.20  | 11.00 ±0.35 | 12.60 min.  | 12.80 min.                             |
|                                              | E                     |       | 5.30 ±0.15  | 5.30 ±0.15  | 6.70 ±0.15  | 7.30 ±0.15                             |
|                                              | F                     |       | 8.60 ±0.15  | 5.50 ±0.25  | 7.30 ±0.20  | 5.60 ±0.15                             |
| Core Set Parameters                          | C1(mm <sup>-1</sup> ) |       | 2.687       | 2.270       | 2.400       | 1.740                                  |
|                                              | Le(mm)                |       | 45.5        | 34.0        | 34.4        | 34.8                                   |
|                                              | Ae(mm <sup>2</sup> )  |       | 16.9        | 15.0        | 14.3        | 20.0                                   |
|                                              | Ve(mm <sup>3</sup> )  |       | 771         | 510         | 492         | 696                                    |
|                                              | Ac(mm <sup>2</sup> )  |       | 15.9        | 12.7        | 30.2        | 21.2                                   |
|                                              | Aw(mm <sup>2</sup> )  |       | 38.3        | 31.4        | 44.5        | 32.7                                   |
|                                              | W(g/set)              |       | 4           | 2.7         | 3.0         | 3.9                                    |
| Electrical Characteristics <sup>(1)(2)</sup> | Al value              | PL-7  | 810         | 890         | 840         | 1050                                   |
|                                              |                       | PL-9  | 1000        | 1110        | 1100        | 1310                                   |
|                                              |                       | PL-11 | 850         | 920         | 900         | 1200                                   |
|                                              |                       | PL-13 | 1070        | 1180        | 1170        | 1400                                   |
|                                              |                       | PL-15 | 850         | 920         | 900         | 1200                                   |
|                                              | Core loss             | PL-7  | 0.46        | 0.31        | 0.30        | 0.42                                   |
|                                              |                       | PL-9  | 0.42        | 0.28        | 0.27        | 0.38                                   |
|                                              |                       | PL-11 | 0.42        | 0.28        | 0.27        | 0.38                                   |
|                                              |                       | PL-13 | 0.41        | 0.27        | 0.26        | 0.37                                   |
|                                              |                       | PL-15 | 0.39        | 0.26        | 0.25        | 0.35                                   |

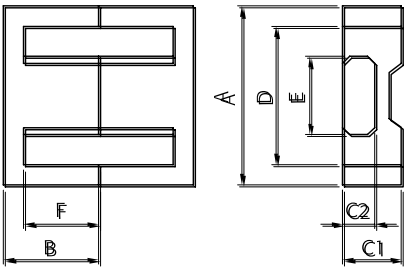
Note : 1) Core loss  
- Unit : Watt max.  
- Measuring conditions  
PL-7, PL-11, PL-15 : 100 kHz, 200mT, at 100℃  
PL-9, PL-13 : 100 kHz, 200mT, at 80℃

2) AL value  
- Unit : nH/N<sup>2</sup>  
- Measuring conditions : 1kHz, 0.1V, 23℃  
- Tolerance: ±25%

EFD CORES



EFD - (a)



EFD - (b)

| Part No.            |    | EFD1820S    | EFD1822S    | EFD2020S    | EFD2023S    |
|---------------------|----|-------------|-------------|-------------|-------------|
| Type                |    | EFD - (a)   | EFD - (a)   | EFD - (b)   | EFD - (b)   |
| Dimensions<br>in mm | A  | 17.70 ±0.30 | 17.70 ±0.30 | 20.00 ±0.55 | 20.00 ±0.55 |
|                     | B  | 10.10 ±0.20 | 10.90 ±0.20 | 10.00 ±0.15 | 11.50 ±0.15 |
|                     | C1 | 5.60 ±0.15  | 5.60 ±0.15  | 6.65 ±0.15  | 6.65 ±0.15  |
|                     | C2 | 3.40 ±0.10  | 3.40 ±0.10  | 3.60 ±0.15  | 3.60 ±0.15  |
|                     | D  | 13.10 min.  | 13.10 min.  | 15.40 ±0.50 | 15.40 ±0.50 |
|                     | E  | 7.50 ±0.15  | 7.50 ±0.15  | 8.90 ±0.20  | 8.90 ±0.20  |
|                     | F  | 7.80 ±0.20  | 8.60 ±0.20  | 7.70 ±0.20  | 9.20 ±0.20  |

|                        |                       |       |       |       |       |
|------------------------|-----------------------|-------|-------|-------|-------|
| Core Set<br>Parameters | C1(mm <sup>-1</sup> ) | 2.020 | 2.140 | 1.520 | 1.710 |
|                        | Le(mm)                | 51.6  | 54.8  | 47.0  | 53.0  |
|                        | Ae(mm <sup>2</sup> )  | 25.6  | 25.6  | 31.0  | 31.0  |
|                        | Ve(mm <sup>3</sup> )  | 1320  | 1402  | 1460  | 1643  |
|                        | Ac(mm <sup>2</sup> )  | 25.5  | 25.5  | 32.0  | 32.0  |
|                        | AW(mm <sup>2</sup> )  | 46.0  | 53.6  | 50.0  | 60.5  |
|                        | W(g/set)              | 5.6   | 6.4   | 7.2   | 7.9   |

|                                                 |           |       |      |      |      |      |
|-------------------------------------------------|-----------|-------|------|------|------|------|
| Electrical<br>Characteristics <sup>(1)(2)</sup> | Al value  | PL-7  | 1050 | 990  | 1370 | 1240 |
|                                                 |           | PL-9  | 1310 | 1250 | 1710 | 1550 |
|                                                 |           | PL-11 | 1100 | 1030 | 1400 | 1300 |
|                                                 |           | PL-13 | 1400 | 1330 | 1820 | 1650 |
|                                                 |           | PL-15 | 1100 | 1030 | 1400 | 1300 |
|                                                 | Core loss | PL-7  | 0.79 | 0.84 | 0.88 | 0.99 |
|                                                 |           | PL-9  | 0.73 | 0.77 | 0.80 | 0.90 |
|                                                 |           | PL-11 | 0.73 | 0.77 | 0.80 | 0.90 |
|                                                 |           | PL-13 | 0.70 | 0.74 | 0.77 | 0.87 |
|                                                 |           | PL-15 | 0.66 | 0.70 | 0.73 | 0.82 |

Note :

1) Core loss

- Unit : Watt max.

- Measuring conditions

PL-7, PL-11, PL-15 : 100 kHz, 200mT, at 100℃

PL-9, PL-13 : 100 kHz, 200mT, at 80℃

2) Al value

- Unit : nH/N<sup>2</sup>

- Measuring conditions : 1kHz, 0.1V, 23℃

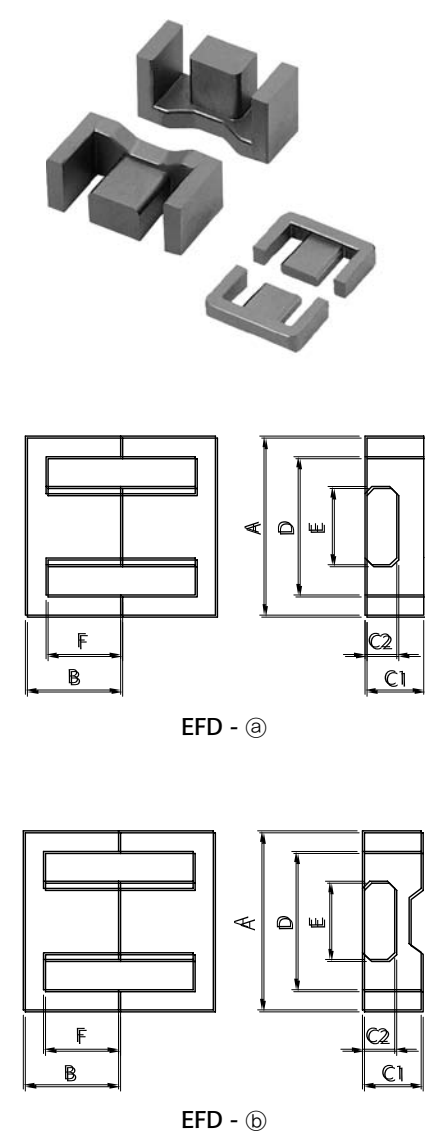
- Tolerance: ±25%

|    | EFD2025N                               | EFD2025S    | EFD2027S                               | EFD2120S    | EFD2124N    | EFD2125S                                | EFD2126N                               | EFD2520S    | EFD2525S    |
|----|----------------------------------------|-------------|----------------------------------------|-------------|-------------|-----------------------------------------|----------------------------------------|-------------|-------------|
|    | EFD - (a)                              | EFD - (a)   | EFD - (a)                              | EFD - (b)   | EFD - (a)   | EFD - (b)                               | EFD - (a)                              | EFD - (b)   | EFD - (b)   |
| A  | 20.30 ±0.35                            | 20.00 ±0.55 | 20.30 ±0.35                            | 20.50 ±0.55 | 21.20 ±0.40 | 20.50 ±0.35                             | 21.20 ±0.40                            | 25.40 ±0.40 | 25.00 ±0.65 |
| B  | 12.75 ±0.25                            | 12.50 ±0.20 | 13.50 ±0.25                            | 10.00 ±0.15 | 11.80 ±0.20 | 12.75 ±0.20                             | 13.10 ±0.20                            | 10.50 ±0.20 | 12.50 ±0.15 |
| C1 | 6.65 <sup>+0.20</sup> <sub>-0.15</sub> | 6.65 ±0.15  | 5.60 <sup>+0.20</sup> <sub>-0.15</sub> | 6.65 ±0.15  | 5.90 ±0.15  | 6.65 ±0.15                              | 5.90 ±0.15                             | 11.00 ±0.20 | 9.10 ±0.20  |
| C2 | 3.60 <sup>+0.20</sup> <sub>-0.15</sub> | 3.60 ±0.15  | 3.40 <sup>+0.20</sup> <sub>-0.15</sub> | 3.60 ±0.15  | 3.30 ±0.10  | 3.60 ±0.15                              | 3.30 ±0.10                             | 6.60 ±0.15  | 5.20 ±0.15  |
| D  | 15.70 ±0.30                            | 15.40 ±0.50 | 14.30 ±0.30                            | 15.90 ±0.30 | 15.80 min.  | 15.90 <sup>+0.30</sup> <sub>-0.25</sub> | 15.80 min.                             | 19.00 ±0.40 | 18.70 ±0.60 |
| E  | 8.90 ±0.20                             | 8.90 ±0.20  | 8.90 ±0.20                             | 8.90 ±0.15  | 9.40 ±0.20  | 8.90 ±0.15                              | 9.40 <sup>+0.15</sup> <sub>-0.25</sub> | 6.60 ±0.15  | 11.40 ±0.20 |
| F  | 10.45 ±0.20                            | 10.20 ±0.20 | 10.45 ±0.20                            | 7.70 ±0.20  | 9.10 ±0.20  | 10.45 ±0.20                             | 10.40 ±0.20                            | 7.00 ±0.15  | 9.30 ±0.25  |

|                       |       |       |       |       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C1(mm <sup>-1</sup> ) | 1.940 | 1.840 | 1.864 | 1.516 | 1.696 | 1.938 | 1.863 | 0.948 | 0.980 |
| Le(mm)                | 59.7  | 57.0  | 61.5  | 47    | 53.1  | 59.7  | 58.3  | 54.8  | 57.0  |
| Ae(mm <sup>2</sup> )  | 30.8  | 31.0  | 33.0  | 31    | 31.3  | 30.8  | 31.3  | 57.8  | 58.0  |
| Ve(mm <sup>3</sup> )  | 1840  | 1767  | 2030  | 1457  | 1660  | 1840  | 1825  | 3163  | 3300  |
| Ac(mm <sup>2</sup> )  | 14.4  | 32.0  | 30.3  | 32    | 31    | 32    | 31    | 43.6  | 60.0  |
| AW(mm <sup>2</sup> )  | 33.8  | 66.3  | 56.4  | 53.9  | 61.9  | 73.2  | 66.6  | 86.8  | 70.0  |
| W(g/set)              | 9.0   | 8.5   | 9.5   | 7.4   | 8.4   | 8.8   | 9.2   | 15    | 17.1  |

|           |       |      |      |      |      |      |      |      |      |      |
|-----------|-------|------|------|------|------|------|------|------|------|------|
| Al value  | PL-7  | 1100 | 1150 | 1130 | 1370 | 1200 | 1100 | 1200 | 2200 | 2250 |
|           | PL-9  | 1360 | 1450 | 1400 | 1700 | 1500 | 1400 | 1500 | 2800 | 2800 |
|           | PL-11 | 1100 | 1200 | 1200 | 1400 | 1300 | 1100 | 1300 | 2300 | 2300 |
|           | PL-13 | 1450 | 1550 | 1490 | 1800 | 1600 | 1500 | 1600 | 3000 | 2980 |
|           | PL-15 | 1100 | 1200 | 1200 | 1400 | 1300 | 1100 | 1300 | 2300 | 2300 |
| Core loss | PL-7  | 1.10 | 1.06 | 1.22 | 0.9  | 1.00 | 1.10 | 1.10 | 1.90 | 1.98 |
|           | PL-9  | 1.01 | 0.97 | 1.12 | 0.80 | 0.91 | 1.01 | 1.00 | 1.74 | 1.82 |
|           | PL-11 | 1.01 | 0.97 | 1.12 | 0.80 | 0.91 | 1.01 | 1.00 | 1.74 | 1.82 |
|           | PL-13 | 0.98 | 0.94 | 1.08 | 0.77 | 0.88 | 0.98 | 0.97 | 1.68 | 1.75 |
|           | PL-15 | 0.92 | 0.88 | 1.02 | 0.73 | 0.83 | 0.92 | 0.91 | 1.58 | 1.65 |

EFD CORES



| Part No.            |    | EFD2525V    | EFD2625S    | EFD3030N    | EFD3030S    |
|---------------------|----|-------------|-------------|-------------|-------------|
| Type                |    | EFD - ㉓     | EFD - ㉔     | EFD - ㉕     | EFD - ㉖     |
| Dimensions<br>in mm | A  | 25.05 ±0.75 | 26.00 ±0.55 | 30.90 ±0.80 | 30.00 ±0.80 |
|                     | B  | 12.60 ±0.20 | 12.60 ±0.15 | 15.30 ±0.20 | 15.00 ±0.15 |
|                     | C1 | 12.45 ±0.25 | 9.10 ±0.20  | 9.10 ±0.20  | 9.10 ±0.25  |
|                     | C2 | 8.30 ±0.30  | 5.20 ±0.15  | 4.90 ±0.15  | 4.90 ±0.15  |
|                     | D  | 19.20 ±0.40 | 19.40 ±0.50 | 23.30 ±0.50 | 22.40 ±0.75 |
|                     | E  | 8.80 ±0.25  | 11.40 ±0.20 | 14.60 ±0.25 | 14.60 ±0.25 |
|                     | F  | 9.55 ±0.25  | 9.30 ±0.25  | 11.50 ±0.30 | 11.20 ±0.30 |

| Core Set<br>Parameters | C1(mm <sup>-1</sup> ) | 0.810 | 0.973 | 1.003 | 0.990 |
|------------------------|-----------------------|-------|-------|-------|-------|
|                        | Le(mm)                | 60.0  | 58.4  | 69.4  | 68.0  |
|                        | Ae(mm²)               | 73.0  | 60.0  | 69.2  | 69.0  |
|                        | Ve(mm³)               | 4300  | 3500  | 4800  | 4700  |
|                        | Ac(mm²)               | 73.0  | 59.0  | 71.5  | 71.0  |
|                        | AW(mm²)               | 91.7  | 74.4  | 100.1 | 87.4  |
|                        | W(g/set)              | 21    | 17    | 24.3  | 22.1  |

| Electrical<br>Characteristics <sup>(1)(2)</sup> | Al value  | PL-7  | 2700 | 2300 | 2300 | 1950 |
|-------------------------------------------------|-----------|-------|------|------|------|------|
|                                                 |           | PL-9  | 3350 | 2870 | 2900 | 2500 |
|                                                 |           | PL-11 | 2800 | 2400 | 2400 | 2000 |
|                                                 |           | PL-13 | 3570 | 3060 | 3100 | 2670 |
|                                                 |           | PL-15 | 2800 | 2400 | 2400 | 2000 |
|                                                 | Core loss | PL-7  | 2.60 | 2.10 | 2.88 | 2.82 |
|                                                 |           | PL-9  | 2.40 | 1.93 | 2.64 | 2.59 |
|                                                 |           | PL-11 | 2.40 | 1.93 | 2.64 | 2.59 |
|                                                 |           | PL-13 | 2.40 | 1.86 | 2.54 | 2.49 |
|                                                 |           | PL-15 | 2.20 | 1.75 | 2.40 | 2.35 |

Note :

1) Core loss

- Unit : Watt max.

- Measuring conditions

PL-7, PL-11, PL-15 : 100 kHz, 200mT, at 100℃

PL-9, PL-13 : 100 kHz, 200mT, at 80℃

2) Al value

- Unit : nH/N²

- Measuring conditions : 1kHz, 0.1V, 23℃

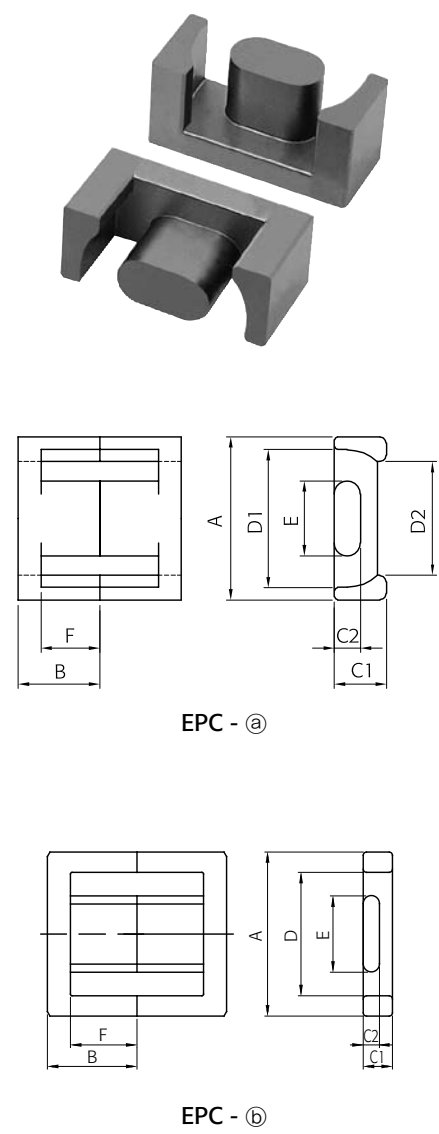
- Tolerance: ±25%

|    | EFD3032S    | EFD3033V    | EFD3130D    | EFD3130S    | EFD3133V    | EFD4351S                                | EFD4549S    | EFD5050S    |
|----|-------------|-------------|-------------|-------------|-------------|-----------------------------------------|-------------|-------------|
|    | EFD - ㉗     | EFD - ㉘     | EFD - ㉙     | EFD - ㉚     | EFD - ㉛     | EFD - ㉜                                 | EFD - ㉝     | EFD - ㉞     |
| A  | 30.00 ±0.80 | 29.70 ±0.80 | 30.90 ±0.80 | 30.90 ±0.80 | 31.70 ±0.60 | 43.00 <sup>+0.40</sup> <sub>-0.50</sub> | 45.20 ±0.50 | 50.00 ±0.50 |
| B  | 16.00 ±0.15 | 16.40 ±0.30 | 15.00 ±0.20 | 15.00 ±0.20 | 16.80 ±0.30 | 26.30 ±0.15                             | 24.50 ±0.20 | 25.00 ±0.30 |
| C1 | 9.10 ±0.20  | 12.50 ±0.40 | 9.10 ±0.20  | 9.10 ±0.25  | 12.50 ±0.40 | 6.70 ±0.15                              | 5.90 ±0.25  | 10.00 ±0.30 |
| C2 | 4.90 ±0.15  | 8.20 ±0.30  | 4.90 ±0.15  | 4.90 ±0.15  | 8.20 ±0.30  | 4.40 ±0.15                              | 3.00 ±0.20  | 6.00 ±0.20  |
| D  | 22.40 ±0.75 | 22.10 ±0.50 | 23.90 ±0.50 | 23.30 ±0.50 | 24.10 ±0.50 | 28.10 ±0.50                             | 33.30 ±0.50 | 35.00 min.  |
| E  | 14.60 ±0.25 | 11.60 ±0.30 | 14.60 ±0.25 | 14.60 ±0.25 | 11.60 ±0.30 | 21.60 ±0.30                             | 24.00 ±0.30 | 23.00 ±0.30 |
| F  | 12.20 ±0.30 | 11.90 ±0.30 | 11.20 ±0.30 | 11.20 ±0.30 | 12.30 ±0.30 | 18.50 ±0.15                             | 17.80 ±0.20 | 17.00 ±0.30 |

| C1(mm <sup>-1</sup> ) | 1.043 | 0.750 | 0.987 | 0.990 | 0.768 | 1.101 | 1.447 | 0.680 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Le(mm)                | 72    | 73.0  | 68.2  | 68.2  | 76    | 107.3 | 105   | 103.3 |
| Ae(mm²)               | 69    | 97.0  | 69.1  | 69.1  | 98.9  | 97.5  | 72.6  | 151.5 |
| Ve(mm³)               | 4968  | 7100  | 4710  | 4712  | 7516  | 10460 | 7620  | 15463 |
| Ac(mm²)               | 71.5  | 95.0  | 71.5  | 71.5  | 95.1  | 95    | 72    | 138.0 |
| AW(mm²)               | 95.2  | 125.0 | 104.2 | 97.4  | 153.8 | 120.3 | 165.5 | 221.0 |
| W(g/set)              | 25.2  | 36.6  | 24    | 24.3  | 24.5  | 55    | 40.7  | 90    |

| Al value  | PL-7  | 1900 | 3020 | 1800 | 1800 | 2500 | 2080 | 1100 | 3100  |
|-----------|-------|------|------|------|------|------|------|------|-------|
|           | PL-9  | 2400 | 3775 | 2300 | 2400 | 3100 | 2600 | 1370 | 3900  |
|           | PL-11 | 2000 | 3100 | 1900 | 1900 | 2600 | 2150 | 1150 | 3200  |
|           | PL-13 | 2600 | 4020 | 2500 | 2560 | 3300 | 2770 | 1470 | 4160  |
|           | PL-15 | 2000 | 3100 | 1900 | 1900 | 2600 | 2150 | 1150 | 3200  |
| Core loss | PL-7  | 2.98 | 4.26 | 2.83 | 2.83 | 4.50 | 6.28 | 4.57 | 10.00 |
|           | PL-9  | 2.73 | 3.91 | 2.59 | 2.59 | 4.10 | 5.75 | 4.19 | 8.00  |
|           | PL-11 | 2.73 | 3.91 | 2.59 | 2.59 | 4.10 | 5.75 | 4.19 | 8.00  |
|           | PL-13 | 2.63 | 3.76 | 2.50 | 2.50 | 4.05 | 5.54 | 4.04 | 7.80  |
|           | PL-15 | 2.48 | 3.55 | 2.36 | 2.36 | 3.90 | 5.23 | 3.81 | 7.60  |

EPC CORES



| Part No.            |    | EPC1313S    | EPC1715N    | EPC1717S    | EPC1720SH   |
|---------------------|----|-------------|-------------|-------------|-------------|
| Type                |    | EPC - ㉓     | EPC - ㉓     | EPC - ㉓     | EPC - ㉓     |
| Dimensions<br>in mm | A  | 13.30 ±0.30 | 17.60 ±0.40 | 17.60 ±0.40 | 16.85 ±0.35 |
|                     | B  | 6.60 ±0.20  | 7.60 ±0.20  | 8.55 ±0.20  | 9.85 ±0.15  |
|                     | C1 | 4.60 ±0.15  | 6.00 ±0.15  | 6.00 ±0.15  | 4.00 ±0.20  |
|                     | C2 | 2.05 ±0.10  | 2.80 ±0.10  | 2.80 ±0.10  | 2.60 ±0.15  |
|                     | D1 | 10.50 min.  | 14.30 min.  | 14.30 min.  | 13.80 ±0.30 |
|                     | D2 | 8.30 min.   | 12.00 ±0.50 | 12.00 ±0.50 | 12.40 ±0.30 |
|                     | E  | 5.60 ±0.15  | 7.70 ±0.15  | 7.70 ±0.15  | 8.20 ±0.20  |
|                     | F  | 4.50 ±0.20  | 5.40 ±0.20  | 6.05 ±0.20  | 7.35 ±0.15  |

| Core Set<br>Parameters | C1(mm <sup>-1</sup> ) | 2.460 | 1.650 | 1.760 | 2.563 |
|------------------------|-----------------------|-------|-------|-------|-------|
|                        | Le(mm)                | 30.6  | 37.6  | 40.2  | 41.7  |
|                        | Ae(mm²)               | 12.5  | 22.8  | 22.8  | 16.3  |
|                        | Ve(mm³)               | 382   | 857   | 917   | 679   |
|                        | Ac(mm²)               | 8.7   | 19.9  | 19.9  | 13.8  |
|                        | Aw(mm²)               | 23.0  | 38.0  | 41.1  | 41.2  |
|                        | W(g/set)              | 2.0   | 4.3   | 4.5   | 3.5   |

| Electrical<br>Characteristics <sup>(1)(2)</sup> | AL value  | PL-7  | 870  | 1300 | 1200 | 830  |
|-------------------------------------------------|-----------|-------|------|------|------|------|
|                                                 |           | PL-9  | 1090 | 1625 | 1500 | 1040 |
|                                                 |           | PL-11 | 900  | 1400 | 1300 | 900  |
|                                                 |           | PL-13 | 1160 | 1730 | 1600 | 1110 |
|                                                 |           | PL-15 | 900  | 1400 | 1300 | 900  |
|                                                 | Core loss | PL-7  | 0.23 | 0.51 | 0.55 | 0.41 |
|                                                 |           | PL-9  | 0.21 | 0.47 | 0.50 | 0.37 |
|                                                 |           | PL-11 | 0.21 | 0.47 | 0.50 | 0.37 |
|                                                 |           | PL-13 | 0.20 | 0.45 | 0.49 | 0.36 |
|                                                 |           | PL-15 | 0.19 | 0.43 | 0.46 | 0.34 |

Note : 1) Core loss

- Unit : Watt max.

- Measuring conditions

PL-7, PL-11, PL-15 : 100 kHz, 200mT, at 100℃

PL-9, PL-13 : 100 kHz, 200mT, at 80℃

2) AL value

- Unit : nH/N²

- Measuring conditions : 1kHz, 0.1V, 23℃

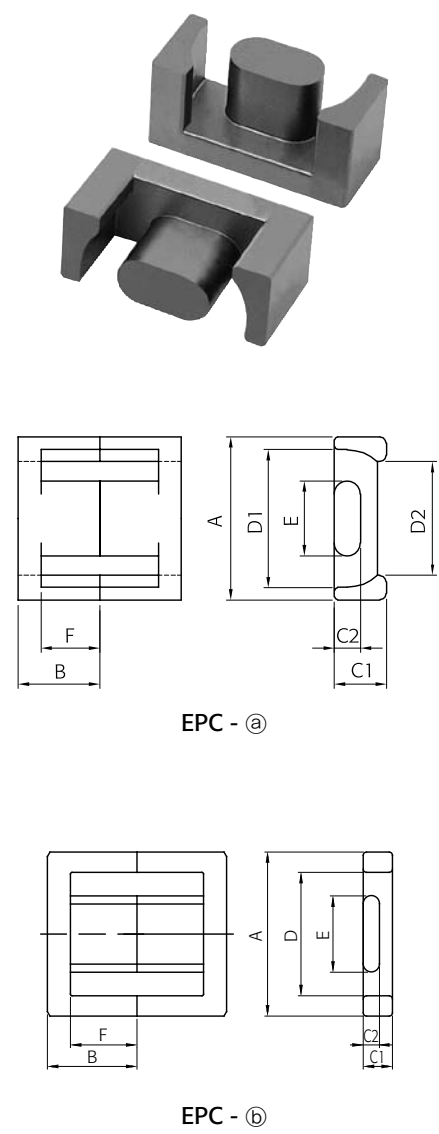
- Tolerance : ±25%

|       | EPC1826W    | EPC1920N    | EPC1920S    | EPC2228S    | EPC2525S    | EPC2732S    | EPC3035S    | EPC4643S    | EPC4649S    |
|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|       | EPC - ㉓     | EPC - ㉓     | EPC - ㉓     | EPC - ㉓     | EPC - ㉓     | EPC - ㉓     | EPC - ㉓     | EPC - ㉓     | EPC - ㉓     |
| A     | 18.50 ±0.30 | 19.60 ±0.50 | 19.10 ±0.50 | 21.90 ±0.30 | 25.10 ±0.50 | 27.10 ±0.50 | 30.10 ±0.50 | 46.00 ±0.70 | 46.00 ±0.70 |
| B     | 13.20 ±0.15 | 9.75 ±0.20  | 9.75 ±0.20  | 14.20 ±0.20 | 12.50 ±0.20 | 16.00 ±0.20 | 17.50 ±0.20 | 21.90 ±0.20 | 24.70 ±0.20 |
| C1    | 4.25 ±0.15  | 6.00 ±0.20  | 6.00 ±0.15  | 7.30 ±0.20  | 8.00 ±0.20  | 8.00 ±0.20  | 8.00 ±0.20  | 19.50 ±0.30 | 19.50 ±0.30 |
| C2    | 2.75 ±0.15  | 2.40 ±0.15  | 2.50 ±0.10  | 4.15 ±0.15  | 4.00 ±0.10  | 4.00 ±0.10  | 4.00 ±0.10  | 12.00 ±0.25 | 12.00 ±0.25 |
| D1(D) | 13.10 min.  | 16.40 ±0.50 | 15.80 min.  | 16.90 ±0.20 | 20.65 min.  | 21.60 min.  | 23.60 min.  | 36.40 ±0.60 | 36.40 ±0.60 |
| D2    | 10.70 min.  | 13.40 ±0.50 | 13.60 ±0.50 | 14.80 min.  | 17.50 ±0.50 | 19.00 ±0.50 | 20.00 ±0.50 | 29.00 ±0.60 | 29.00 ±0.60 |
| E     | 9.10 ±0.15  | 8.30 ±0.20  | 8.50 ±0.15  | 9.50 ±0.15  | 11.50 ±0.20 | 13.00 ±0.30 | 15.00 ±0.30 | 21.00 ±0.30 | 21.00 ±0.30 |
| F     | 10.30 ±0.15 | 7.25 ±0.20  | 7.25 ±0.20  | 11.55 ±0.15 | 9.00 ±0.30  | 12.00 ±0.30 | 13.00 ±0.30 | 15.50 ±0.25 | 18.30 ±0.25 |

| C1(mm <sup>-1</sup> ) | 2.630 | 1.890 | 2.030 | 1.380 | 1.270 | 1.426 | 1.320 | 0.441 | 0.486 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Le(mm)                | 62.0  | 43.3  | 46.1  | 50.8  | 59.2  | 70.1  | 81.6  | 100   | 110.4 |
| Ae(mm²)               | 23.6  | 23.0  | 22.7  | 36.7  | 46.4  | 49.1  | 61.0  | 227   | 227   |
| Ve(mm³)               | 1460  | 996   | 1047  | 1864  | 2747  | 3441  | 5035  | 22700 | 25060 |
| Ac(mm²)               | 15.8  | 19.3  | 20.0  | 39.0  | 42.6  | 48.6  | 56.6  | 221   | 221   |
| Aw(mm²)               | 44.3  | 59.5  | 54.4  | 83.0  | 90.3  | 108.0 | 117.0 | 238.7 | 281.8 |
| W(g/set)              | 6.8   | 5.6   | 5.2   | 12    | 13    | 18    | 23    | 122   | 134   |

| AL value  | PL-7  | 1050 | 1200 | 1090 | 1500 | 1600 | 1720 | 1640 | 4800  | 4700  |
|-----------|-------|------|------|------|------|------|------|------|-------|-------|
|           | PL-9  | 1150 | 1500 | 1250 | 1900 | 2000 | 1925 | 2050 | 6000  | 5875  |
|           | PL-11 | 1100 | 1300 | 1130 | 1600 | 1700 | 1600 | 1700 | 5000  | 4800  |
|           | PL-13 | 1230 | 1600 | 1300 | 2030 | 2130 | 2050 | 2190 | 6400  | 6270  |
|           | PL-15 | 1100 | 1300 | 1130 | 1600 | 1700 | 1600 | 1700 | 5000  | 4800  |
| Core loss | PL-7  | 0.88 | 0.60 | 0.63 | 1.12 | 1.65 | 2.28 | 3.02 | 13.62 | 15.04 |
|           | PL-9  | 0.80 | 0.55 | 0.58 | 1.03 | 1.51 | 2.09 | 2.77 | 12.49 | 13.78 |
|           | PL-11 | 0.80 | 0.55 | 0.58 | 1.03 | 1.51 | 2.09 | 2.77 | 12.49 | 13.78 |
|           | PL-13 | 0.77 | 0.53 | 0.55 | 0.99 | 1.46 | 2.02 | 2.67 | 12.03 | 13.28 |
|           | PL-15 | 0.73 | 0.50 | 0.52 | 0.93 | 1.37 | 1.90 | 2.52 | 11.35 | 12.53 |

EPC CORES



| Part No.                                                                                                                                                                                                                                                                                                                                   |                       | EPC5050S    | EPC5055S    |      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------|-------------|------|
| Type                                                                                                                                                                                                                                                                                                                                       |                       | EPC - ㉔     | EPC - ㉔     |      |
| Dimensions<br>in mm                                                                                                                                                                                                                                                                                                                        | A                     | 50.50 ±0.70 | 50.50 ±0.70 |      |
|                                                                                                                                                                                                                                                                                                                                            | B                     | 25.60 ±0.30 | 27.60 ±0.30 |      |
|                                                                                                                                                                                                                                                                                                                                            | C1                    | 9.00 ±0.30  | 9.00 ±0.30  |      |
|                                                                                                                                                                                                                                                                                                                                            | C2                    | 5.00 ±0.10  | 5.00 ±0.10  |      |
|                                                                                                                                                                                                                                                                                                                                            | D1                    | 38.00 ±0.70 | 38.00 ±0.70 |      |
|                                                                                                                                                                                                                                                                                                                                            | D2                    |             |             |      |
|                                                                                                                                                                                                                                                                                                                                            | E                     | 23.50 ±0.40 | 23.50 ±0.40 |      |
|                                                                                                                                                                                                                                                                                                                                            | F                     | 18.50 ±0.30 | 20.50 ±0.30 |      |
| Core Set<br>Parameters                                                                                                                                                                                                                                                                                                                     | C1(mm <sup>-1</sup> ) | 0.995       | 0.995       |      |
|                                                                                                                                                                                                                                                                                                                                            | Le(mm)                | 113.7       | 114.0       |      |
|                                                                                                                                                                                                                                                                                                                                            | Ae(mm <sup>2</sup> )  | 114.3       | 114.3       |      |
|                                                                                                                                                                                                                                                                                                                                            | Ve(mm <sup>3</sup> )  | 12990       | 13030       |      |
|                                                                                                                                                                                                                                                                                                                                            | Ac(mm <sup>2</sup> )  | 105         | 105         |      |
|                                                                                                                                                                                                                                                                                                                                            | Aw(mm <sup>2</sup> )  | 268.3       | 297         |      |
|                                                                                                                                                                                                                                                                                                                                            | W(g/set)              | 70          | 78          |      |
| Electrical<br>Characteristics <sup>(1)(2)</sup>                                                                                                                                                                                                                                                                                            | AL value              | PL-7        | 2400        | 2100 |
|                                                                                                                                                                                                                                                                                                                                            |                       | PL-9        | 3000        | 2650 |
|                                                                                                                                                                                                                                                                                                                                            |                       | PL-11       | 2500        | 2200 |
|                                                                                                                                                                                                                                                                                                                                            |                       | PL-13       | 3200        | 2800 |
|                                                                                                                                                                                                                                                                                                                                            |                       | PL-15       | 2500        | 2200 |
|                                                                                                                                                                                                                                                                                                                                            | Core loss             | PL-7        | 7.79        | 8.50 |
|                                                                                                                                                                                                                                                                                                                                            |                       | PL-9        | 7.14        | 7.79 |
|                                                                                                                                                                                                                                                                                                                                            |                       | PL-11       | 7.14        | 7.79 |
|                                                                                                                                                                                                                                                                                                                                            |                       | PL-13       | 6.88        | 7.51 |
|                                                                                                                                                                                                                                                                                                                                            |                       | PL-15       | 6.50        | 7.09 |
| <div>Note :<div>1) Core loss<div>- Unit : Watt max.</div><div>- Measuring conditions<br/>PL-7, PL-11, PL-15 : 100 kHz, 200mT, at 100℃<br/>PL-9, PL-13 : 100 kHz, 200mT, at 80℃</div></div><div>2) AL value<div>- Unit : nH/N<sup>2</sup></div><div>- Measuring conditions : 1kHz, 0.1V, 23℃</div><div>- Tolerance : ±25%</div></div></div> |                       |             |             |      |