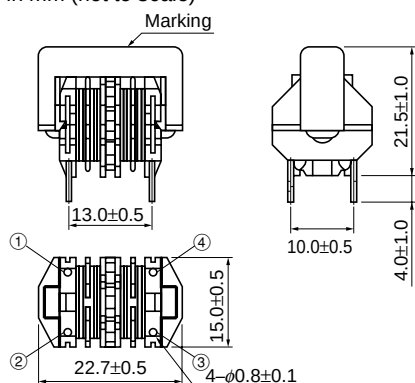


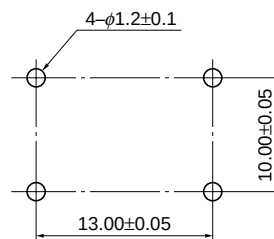
## ■ Series N, High N

### ● Type 15N, 17N

Dimensions in mm (not to scale)



Recommended PWB piercing plan



### ● Standard Parts (Series N : 15N)

| Part No.   | Marking | Inductance (mH) min. | *R <sub>DC</sub> (Ω) [at 20 °C] (Tol ±20 %) | Current (A rms) max. |
|------------|---------|----------------------|---------------------------------------------|----------------------|
| ELF15N002A | 104 02  | 104.0                | 7.543                                       | 0.2                  |
| ELF15N003A | 433 03  | 43.0                 | 3.154                                       | 0.3                  |
| ELF15N004A | 263 04  | 26.0                 | 1.966                                       | 0.4                  |
| ELF15N005A | 193 05  | 19.0                 | 1.324                                       | 0.5                  |
| ELF15N006A | 123 06  | 12.0                 | 0.933                                       | 0.6                  |
| ELF15N007A | 103 07  | 10.0                 | 0.762                                       | 0.7                  |
| ELF15N008A | 682 08  | 6.8                  | 0.548                                       | 0.8                  |
| ELF15N010A | 532 10  | 5.3                  | 0.369                                       | 1.0                  |
| ELF15N011A | 402 11  | 4.0                  | 0.308                                       | 1.1                  |
| ELF15N013A | 272 13  | 2.7                  | 0.202                                       | 1.3                  |
| ELF15N015A | 212 15  | 2.1                  | 0.170                                       | 1.5                  |
| ELF15N017A | 172 17  | 1.7                  | 0.126                                       | 1.7                  |
| ELF15N022A | 102 22  | 1.0                  | 0.078                                       | 2.2                  |
| ELF15N030A | 601 30  | 0.6                  | 0.052                                       | 3.0                  |

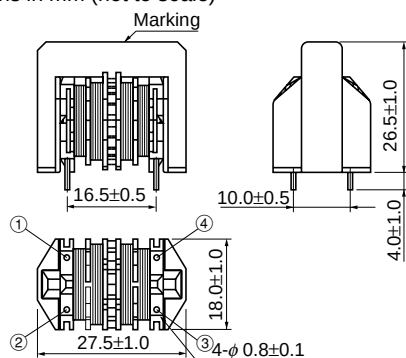
### ● Standard Parts (Series High N : 17N)

| Part No.   | Marking  | Inductance (mH) min. | *R <sub>DC</sub> (Ω) [at 20 °C] (Tol ±20 %) | Current (A rms) max. |
|------------|----------|----------------------|---------------------------------------------|----------------------|
| ELF17N002A | · 144 02 | 142.0                | 7.543                                       | 0.2                  |
| ELF17N003A | · 603 03 | 60.0                 | 3.154                                       | 0.3                  |
| ELF17N004A | · 353 04 | 35.0                 | 1.966                                       | 0.4                  |
| ELF17N005A | · 263 05 | 26.0                 | 1.324                                       | 0.5                  |
| ELF17N006A | · 163 06 | 16.0                 | 0.933                                       | 0.6                  |
| ELF17N007A | · 143 07 | 14.0                 | 0.762                                       | 0.7                  |
| ELF17N008A | · 922 08 | 9.2                  | 0.548                                       | 0.8                  |
| ELF17N010A | · 722 10 | 7.2                  | 0.369                                       | 1.0                  |
| ELF17N011A | · 542 11 | 5.4                  | 0.308                                       | 1.1                  |
| ELF17N013A | · 372 13 | 3.7                  | 0.202                                       | 1.3                  |
| ELF17N015A | · 292 15 | 2.9                  | 0.170                                       | 1.5                  |
| ELF17N017A | · 232 17 | 2.3                  | 0.126                                       | 1.7                  |
| ELF17N022A | · 132 22 | 1.3                  | 0.078                                       | 2.2                  |
| ELF17N030A | · 801 30 | 0.8                  | 0.052                                       | 3.0                  |

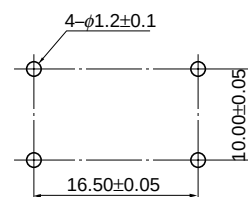
\* DC Resistance

### ● Type 18N, 19N

Dimensions in mm (not to scale)



Recommended PWB piercing plan



### ● Standard Parts (Series N : 18N)

| Part No.   | Marking | Inductance (mH) min. | *R <sub>DC</sub> (Ω) [at 20 °C] (Tol ±20 %) | Current (A rms) max. |
|------------|---------|----------------------|---------------------------------------------|----------------------|
| ELF18N004A | 803 04  | 80.0                 | 2.720                                       | 0.4                  |
| ELF18N005A | 503 05  | 50.0                 | 1.680                                       | 0.5                  |
| ELF18N006A | 353 06  | 35.0                 | 1.100                                       | 0.6                  |
| ELF18N008A | 203 08  | 20.0                 | 0.670                                       | 0.8                  |
| ELF18N010A | 153 10  | 15.0                 | 0.465                                       | 1.0                  |
| ELF18N012A | 952 12  | 9.5                  | 0.300                                       | 1.2                  |
| ELF18N016A | 602 16  | 6.0                  | 0.185                                       | 1.6                  |
| ELF18N020A | 422 20  | 4.2                  | 0.130                                       | 2.0                  |
| ELF18N025A | 242 25  | 2.4                  | 0.080                                       | 2.5                  |
| ELF18N032A | 142 32  | 1.4                  | 0.045                                       | 3.2                  |

### ● Standard Parts (Series High N : 19N)

| Part No.   | Marking  | Inductance (mH) min. | *R <sub>DC</sub> (Ω) [at 20 °C] (Tol ±20 %) | Current (A rms) max. |
|------------|----------|----------------------|---------------------------------------------|----------------------|
| ELF19N004A | · 993 04 | 99.0                 | 2.720                                       | 0.4                  |
| ELF19N005A | · 623 05 | 62.0                 | 1.680                                       | 0.5                  |
| ELF19N006A | · 433 06 | 43.0                 | 1.100                                       | 0.6                  |
| ELF19N008A | · 253 08 | 25.0                 | 0.670                                       | 0.8                  |
| ELF19N010A | · 193 10 | 19.0                 | 0.465                                       | 1.0                  |
| ELF19N012A | · 123 12 | 12.0                 | 0.300                                       | 1.2                  |
| ELF19N016A | · 742 16 | 7.4                  | 0.185                                       | 1.6                  |
| ELF19N020A | · 512 20 | 5.1                  | 0.130                                       | 2.0                  |
| ELF19N025A | · 302 25 | 3.0                  | 0.080                                       | 2.5                  |
| ELF19N032A | · 172 32 | 1.7                  | 0.045                                       | 3.2                  |

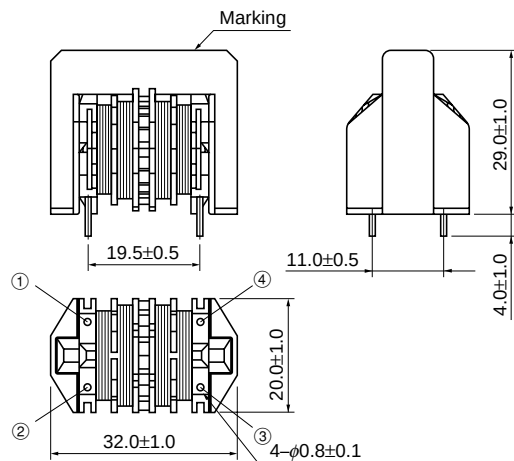
\* DC Resistance

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.  
Should a safety concern arise regarding this product, please be sure to contact us immediately.

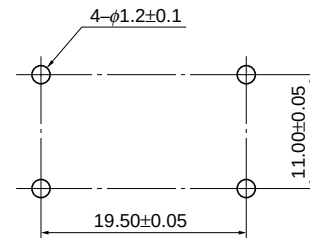
## ■ Series N, High N

### ● Type 20N, 21N

Dimensions in mm (not to scale)



Recommended PWB piercing plan



### ● Standard Parts (Series N : 20N)

| Part No.   | Marking | Inductance (mH) min. | *R <sub>DC</sub> (Ω)<br>[at 20 °C]<br>(Tol ±20 %) | Current (A rms) max. |
|------------|---------|----------------------|---------------------------------------------------|----------------------|
| ELF20N006A | 693 06  | 69.0                 | 1.250                                             | 0.6                  |
| ELF20N008A | 433 08  | 43.0                 | 0.770                                             | 0.8                  |
| ELF20N010A | 283 10  | 28.0                 | 0.500                                             | 1.0                  |
| ELF20N013A | 183 13  | 18.0                 | 0.317                                             | 1.3                  |
| ELF20N015A | 143 15  | 14.0                 | 0.240                                             | 1.5                  |
| ELF20N016A | 123 16  | 12.0                 | 0.212                                             | 1.6                  |
| ELF20N018A | 752 18  | 7.5                  | 0.160                                             | 1.8                  |
| ELF20N020A | 702 20  | 7.0                  | 0.134                                             | 2.0                  |
| ELF20N022A | 622 22  | 6.2                  | 0.111                                             | 2.2                  |
| ELF20N024A | 492 24  | 4.9                  | 0.094                                             | 2.4                  |
| ELF20N027A | 472 27  | 4.7                  | 0.082                                             | 2.7                  |
| ELF20N030A | 292 30  | 2.9                  | 0.056                                             | 3.0                  |
| ELF20N035A | 202 35  | 2.0                  | 0.044                                             | 3.5                  |
| ELF20N040A | 152 40  | 1.5                  | 0.033                                             | 4.0                  |

### ● Standard Parts (Series High N : 21N)

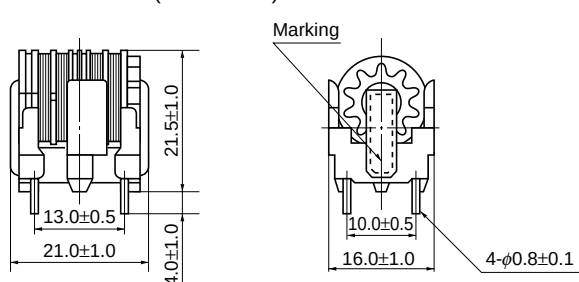
| Part No.   | Marking  | Inductance (mH) min. | *R <sub>DC</sub> (Ω)<br>[at 20 °C]<br>(Tol ±20 %) | Current (A rms) max. |
|------------|----------|----------------------|---------------------------------------------------|----------------------|
| ELF21N006A | · 873 06 | 87.0                 | 1.250                                             | 0.6                  |
| ELF21N008A | · 543 08 | 54.0                 | 0.770                                             | 0.8                  |
| ELF21N010A | · 363 10 | 36.0                 | 0.500                                             | 1.0                  |
| ELF21N013A | · 223 13 | 22.0                 | 0.317                                             | 1.3                  |
| ELF21N015A | · 183 15 | 18.0                 | 0.240                                             | 1.5                  |
| ELF21N016A | · 153 16 | 15.0                 | 0.212                                             | 1.6                  |
| ELF21N018A | · 942 18 | 9.4                  | 0.160                                             | 1.8                  |
| ELF21N020A | · 872 20 | 8.7                  | 0.134                                             | 2.0                  |
| ELF21N022A | · 782 22 | 7.8                  | 0.111                                             | 2.2                  |
| ELF21N024A | · 612 24 | 6.1                  | 0.094                                             | 2.4                  |
| ELF21N027A | · 582 27 | 5.8                  | 0.082                                             | 2.7                  |
| ELF21N030A | · 372 30 | 3.7                  | 0.056                                             | 3.0                  |
| ELF21N035A | · 252 35 | 2.5                  | 0.044                                             | 3.5                  |
| ELF21N040A | · 192 40 | 1.9                  | 0.033                                             | 4.0                  |

\* DC Resistance

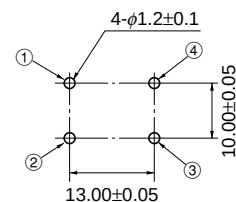
## ■ Series V

### ● Type 290

Dimensions in mm (not to scale)



Recommended PWB piercing plan



### ● Standard Parts

| Part No.   | Marking | Inductance (mH) min. | *R <sub>DC</sub> (Ω)<br>[at 20 °C]<br>(Tol ±20 %) | Current (A rms) max. | Part No.   | Marking | Inductance (mH) min. | *R <sub>DC</sub> (Ω)<br>[at 20 °C]<br>(Tol ±20 %) | Current (A rms) max. |
|------------|---------|----------------------|---------------------------------------------------|----------------------|------------|---------|----------------------|---------------------------------------------------|----------------------|
| ELF18D290H | 290H    | 33.00                | 2.691                                             | 0.3                  | ELF18D290R | 290R    | 3.90                 | 0.305                                             | 1.0                  |
| ELF18D290C | 290C    | 22.00                | 1.707                                             | 0.4                  | ELF18D290S | 290S    | 3.30                 | 0.277                                             | 1.1                  |
| ELF18D290A | 290A    | 18.00                | 1.271                                             | 0.5                  | ELF18D290E | 290E    | 2.70                 | 0.248                                             | 1.1                  |
| ELF18D290G | 290G    | 10.00                | 0.782                                             | 0.6                  | ELF18D290T | 290T    | 2.20                 | 0.186                                             | 1.3                  |
| ELF18D290L | 290L    | 8.20                 | 0.681                                             | 0.6                  | ELF18D290V | 290V    | 1.80                 | 0.162                                             | 1.5                  |
| ELF18D290P | 290P    | 6.80                 | 0.571                                             | 0.7                  | ELF18D290D | 290D    | 1.20                 | 0.119                                             | 1.6                  |
| ELF18D290M | 290M    | 5.60                 | 0.504                                             | 0.8                  | ELF18D290B | 290B    | 0.82                 | 0.072                                             | 2.0                  |

\* DC Resistance

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.  
Should a safety concern arise regarding this product, please be sure to contact us immediately.