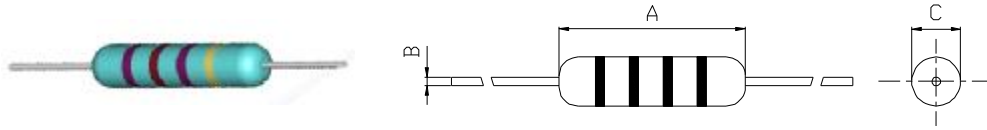


## MECHANICALS



### I FEATURE

1. Conformal coated inductors .
2. Special magnetic core structure contributes to high Q and Self-Resonant Frequencies .
3. Epoxy coated for better reliability.
4. Wide inductance range.
5. Ideal for auto insertion

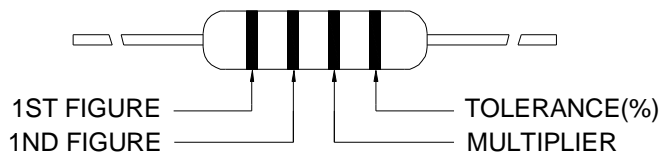
### 特性

1. 色碼電感結構堅固，成本低廉，適合自動化生產.
2. 特殊鐵芯材質，高 Q 值及自共振頻率.
3. 外層用環氧樹脂處理，可靠度高.
4. 電感範圍大
5. 可自動插件

### I DIMENSIONS(UNIT:mm)

| TYPE | A       | B         | C       |
|------|---------|-----------|---------|
| EC36 | 11.0MAX | 0.65±0.05 | 4.0 MAX |
| EC24 | 8.0 MAX | 0.55±0.05 | 3.0 MAX |
| EC22 | 4.0 MAX | 0.50±0.05 | 2.8 MAX |

### I COLOR CODE FOR DISCRETE RESISTANCE



There is no tolerance marked for values below 0.1uH

電感值在 0.1uH 以下時,不標示容許公差

| COLOR  | 1ST .FIGURE | 2ND. FIGURE | MULTIPLIER | TOLERANCE(%) |
|--------|-------------|-------------|------------|--------------|
| Black  | 0           | 0           | 1          | ±20%         |
| Brown  | 1           | 1           | 10         |              |
| Red    | 2           | 2           | 100        |              |
| Orange | 3           | 3           | 1000       |              |
| Yellow | 4           | 4           | —          |              |
| Green  | 5           | 5           | —          |              |
| Blue   | 6           | 6           | —          |              |
| Purple | 7           | 7           | —          |              |
| Gray   | 8           | 8           | —          |              |
| White  | 9           | 9           | —          |              |
| gold   | —           | —           | 0.1        | ±5%          |
| silver | —           | —           | 0.01       | ±10%         |

NOTE : EC MEANS EPOXY COATED AND TAPING WITH REEL(EC:色碼電感)

## I SELECTION GUIDE FOR STANDARD COILS

| PART NO   | INDUCTANCE<br>( $\mu$ H) | TOLERANCE<br>(%) | Q<br>MIN. | TEST<br>FREQ<br>(MHz) | DC<br>RESISTANCE<br>( $\Omega$ )MAX | RATED DC<br>CURRENT<br>(mA)MAX | S.R.F<br>FREQ<br>(MHz)MIN. |
|-----------|--------------------------|------------------|-----------|-----------------------|-------------------------------------|--------------------------------|----------------------------|
| EC36-R10M | 0.10                     | $\pm 20\%$       | 50        | 25.2                  | 0.20                                | 460                            | 170                        |
| EC36-R12M | 0.12                     | $\pm 20\%$       | 50        | 25.2                  | 0.20                                | 445                            | 170                        |
| EC36-R15M | 0.15                     | $\pm 20\%$       | 50        | 25.2                  | 0.25                                | 440                            | 165                        |
| EC36-R18M | 0.18                     | $\pm 20\%$       | 50        | 25.2                  | 0.30                                | 430                            | 160                        |
| EC36-R22M | 0.22                     | $\pm 20\%$       | 50        | 25.2                  | 0.40                                | 400                            | 150                        |
| EC36-R27M | 0.27                     | $\pm 20\%$       | 35        | 25.2                  | 0.43                                | 380                            | 150                        |
| EC36-R33M | 0.33                     | $\pm 20\%$       | 35        | 25.2                  | 0.48                                | 370                            | 150                        |
| EC36-R39M | 0.39                     | $\pm 20\%$       | 35        | 25.2                  | 0.51                                | 350                            | 150                        |
| EC36-R47M | 0.47                     | $\pm 20\%$       | 35        | 25.2                  | 0.56                                | 330                            | 150                        |
| EC36-R56M | 0.56                     | $\pm 20\%$       | 35        | 25.2                  | 0.61                                | 320                            | 150                        |
| EC36-R68M | 0.68                     | $\pm 20\%$       | 35        | 25.20                 | 0.67                                | 310                            | 150                        |
| EC36-R82M | 0.82                     | $\pm 20\%$       | 35        | 25.20                 | 0.74                                | 290                            | 150                        |
| EC36-1R0K | 1.00                     | $\pm 10\%$       | 35        | 25.20                 | 0.80                                | 270                            | 150                        |
| EC36-1R2K | 1.20                     | $\pm 10\%$       | 45        | 7.96                  | 0.90                                | 260                            | 140                        |
| EC36-1R5K | 1.50                     | $\pm 10\%$       | 45        | 7.96                  | 1.00                                | 250                            | 130                        |
| EC36-1R8K | 1.8                      | $\pm 10\%$       | 45        | 7.96                  | 1.10                                | 240                            | 120                        |
| EC36-2R2K | 2.2                      | $\pm 10\%$       | 45        | 7.96                  | 1.20                                | 230                            | 100                        |
| EC36-2R7K | 2.7                      | $\pm 10\%$       | 45        | 7.96                  | 1.30                                | 220                            | 100                        |
| EC36-3R3K | 3.3                      | $\pm 10\%$       | 45        | 7.96                  | 1.40                                | 210                            | 90                         |
| EC36-3R9K | 3.9                      | $\pm 10\%$       | 45        | 7.96                  | 1.60                                | 200                            | 60                         |
| EC36-4R7K | 4.7                      | $\pm 10\%$       | 45        | 7.96                  | 1.70                                | 190                            | 50                         |
| EC36-5R6K | 5.6                      | $\pm 10\%$       | 45        | 7.96                  | 1.90                                | 180                            | 40                         |
| EC36-6R8K | 6.8                      | $\pm 10\%$       | 45        | 7.96                  | 2.20                                | 175                            | 30                         |
| EC36-8R2K | 8.2                      | $\pm 10\%$       | 45        | 7.96                  | 2.20                                | 165                            | 25                         |
| EC36-100K | 10.0                     | $\pm 10\%$       | 45        | 7.96                  | 2.50                                | 160                            | 20                         |
| EC36-120K | 12                       | $\pm 10\%$       | 45        | 2.52                  | 2.50                                | 150                            | 15                         |
| EC36-150K | 15                       | $\pm 10\%$       | 45        | 2.52                  | 3.10                                | 145                            | 15                         |
| EC36-180K | 18                       | $\pm 10\%$       | 45        | 2.52                  | 3.10                                | 140                            | 13                         |
| EC36-220K | 22                       | $\pm 10\%$       | 45        | 2.52                  | 3.40                                | 130                            | 9                          |
| EC36-270K | 27                       | $\pm 10\%$       | 45        | 2.52                  | 4.30                                | 125                            | 7                          |
| EC36-330K | 33                       | $\pm 10\%$       | 45        | 2.52                  | 4.70                                | 110                            | 6.0                        |
| EC36-390K | 39                       | $\pm 10\%$       | 45        | 2.52                  | 5.20                                | 115                            | 6.0                        |
| EC36-470K | 47                       | $\pm 10\%$       | 45        | 2.52                  | 5.80                                | 140                            | 6.0                        |
| EC36-560K | 56                       | $\pm 10\%$       | 45        | 2.52                  | 6.40                                | 130                            | 6.0                        |
| EC36-680K | 68                       | $\pm 10\%$       | 45        | 2.52                  | 7.20                                | 125                            | 6.5                        |
| EC36-820K | 82                       | $\pm 10\%$       | 45        | 2.520                 | 11.0                                | 95                             | 5.5                        |
| EC36-101K | 100                      | $\pm 10\%$       | 45        | 2.520                 | 12.0                                | 90                             | 4.5                        |
| EC36-121K | 120                      | $\pm 10\%$       | 45        | 0.796                 | 13.0                                | 90                             | 3.5                        |
| EC36-151K | 150                      | $\pm 10\%$       | 45        | 0.796                 | 16.0                                | 85                             | 3.5                        |
| EC36-181K | 180                      | $\pm 10\%$       | 45        | 0.796                 | 18.0                                | 80                             | 3.0                        |
| EC36-221K | 220                      | $\pm 10\%$       | 45        | 0.796                 | 20.0                                | 75                             | 3.0                        |
| EC36-271K | 270                      | $\pm 10\%$       | 45        | 0.796                 | 22.0                                | 65                             | 2.5                        |
| EC36-331K | 330                      | $\pm 10\%$       | 45        | 0.796                 | 22.0                                | 60                             | 2.5                        |
| EC36-391K | 390                      | $\pm 10\%$       | 45        | 0.796                 | 22.0                                | 55                             | 2.3                        |
| EC36-471K | 470                      | $\pm 10\%$       | 45        | 0.796                 | 22.0                                | 55                             | 2.2                        |



## I SELECTION GUIDE FOR STANDARD COILS

| PART NO   | INDUCTANCE<br>( $\mu$ H) | TOLERANCE<br>(%) | Q<br>MIN. | TEST<br>FREQ<br>(MHz) | DC<br>RESISTANCE<br>( $\Omega$ )MAX | RATED DC<br>CURRENT<br>(mA)MAX | S.R.F<br>FREQ<br>(MHz)MIN. |
|-----------|--------------------------|------------------|-----------|-----------------------|-------------------------------------|--------------------------------|----------------------------|
| EC24-1R0M | 1.0                      | $\pm 20\%$       | 45        | 7.96                  | 0.18                                | 800                            | 93                         |
| EC24-1R2M | 1.2                      | $\pm 20\%$       | 50        | 7.96                  | 0.20                                | 730                            | 86                         |
| EC24-1R5M | 1.5                      | $\pm 20\%$       | 50        | 7.96                  | 0.22                                | 700                            | 80                         |
| EC24-1R8M | 1.8                      | $\pm 20\%$       | 55        | 7.96                  | 0.24                                | 670                            | 75                         |
| EC24-2R2M | 2.2                      | $\pm 20\%$       | 55        | 7.96                  | 0.27                                | 660                            | 70                         |
| EC24-2R7M | 2.7                      | $\pm 20\%$       | 55        | 7.96                  | 0.30                                | 650                            | 67                         |
| EC24-3R3M | 3.3                      | $\pm 20\%$       | 60        | 7.96                  | 0.34                                | 600                            | 63                         |
| EC24-3R9M | 3.9                      | $\pm 20\%$       | 65        | 7.96                  | 0.36                                | 570                            | 43                         |
| EC24-4R7M | 4.7                      | $\pm 20\%$       | 70        | 7.96                  | 0.38                                | 550                            | 37                         |
| EC24-5R6M | 5.6                      | $\pm 20\%$       | 70        | 7.96                  | 0.40                                | 520                            | 32                         |
| EC24-6R8M | 6.8                      | $\pm 20\%$       | 60        | 7.96                  | 0.45                                | 500                            | 25                         |
| EC24-8R2M | 8.2                      | $\pm 10\%$       | 60        | 7.96                  | 0.50                                | 460                            | 16.5                       |
| EC24-100K | 10                       | $\pm 10\%$       | 60        | 7.96                  | 0.60                                | 460                            | 14                         |
| EC24-120K | 12                       | $\pm 10\%$       | 50        | 2.52                  | 0.65                                | 380                            | 12.5                       |
| EC24-150K | 15                       | $\pm 10\%$       | 50        | 2.52                  | 0.74                                | 340                            | 11                         |
| EC24-180K | 18                       | $\pm 10\%$       | 50        | 2.52                  | 0.80                                | 320                            | 8.5                        |
| EC24-220K | 22                       | $\pm 10\%$       | 45        | 2.52                  | 0.85                                | 310                            | 6.8                        |
| EC24-270K | 27                       | $\pm 10\%$       | 45        | 2.52                  | 0.95                                | 290                            | 4.8                        |
| EC24-330K | 33                       | $\pm 10\%$       | 45        | 2.52                  | 1.10                                | 280                            | 4.2                        |
| EC24-390K | 39                       | $\pm 10\%$       | 45        | 2.52                  | 1.90                                | 220                            | 4.2                        |
| EC24-470K | 47                       | $\pm 10\%$       | 45        | 2.52                  | 2.10                                | 200                            | 4.2                        |
| EC24-560K | 56                       | $\pm 10\%$       | 40        | 2.52                  | 2.30                                | 200                            | 4.1                        |
| EC24-680K | 68                       | $\pm 10\%$       | 40        | 2.52                  | 2.50                                | 190                            | 3.8                        |
| EC24-820K | 82                       | $\pm 10\%$       | 40        | 2.52                  | 2.70                                | 180                            | 3.5                        |
| EC24-101K | 100                      | $\pm 10\%$       | 40        | 2.52                  | 3.40                                | 150                            | 3.2                        |
| EC24-121K | 120                      | $\pm 10\%$       | 55        | 0.796                 | 4.70                                | 150                            | 2.5                        |
| EC24-151K | 150                      | $\pm 10\%$       | 45        | 0.796                 | 5.00                                | 130                            | 2.3                        |
| EC24-181K | 180                      | $\pm 10\%$       | 50        | 0.796                 | 5.65                                | 130                            | 2.2                        |
| EC24-221K | 220                      | $\pm 10\%$       | 55        | 0.796                 | 6.15                                | 120                            | 2.0                        |
| EC24-271K | 270                      | $\pm 10\%$       | 50        | 0.796                 | 7.10                                | 120                            | 1.8                        |
| EC24-331K | 330                      | $\pm 10\%$       | 50        | 0.796                 | 7.70                                | 110                            | 1.7                        |
| EC24-391K | 390                      | $\pm 10\%$       | 50        | 0.796                 | 10.45                               | 100                            | 1.6                        |
| EC24-471K | 470                      | $\pm 10\%$       | 50        | 0.796                 | 11.90                               | 90                             | 1.5                        |
| EC24-561K | 560                      | $\pm 10\%$       | 50        | 0.796                 | 13.25                               | 90                             | 1.4                        |
| EC24-681K | 680                      | $\pm 10\%$       | 50        | 0.796                 | 15.10                               | 80                             | 1.3                        |
| EC24-821K | 820                      | $\pm 10\%$       | 45        | 0.796                 | 20.0                                | 60                             | 1.2                        |
| EC24-102K | 1000                     | $\pm 10\%$       | 40        | 0.796                 | 21.0                                | 60                             | 0.9                        |
| EC24-122K | 1200                     | $\pm 10\%$       | 30        | 0.252                 | 32.0                                | 55                             | 0.82                       |
| EC24-152K | 1500                     | $\pm 10\%$       | 30        | 0.252                 | 44.0                                | 45                             | 0.76                       |
| EC24-182K | 1800                     | $\pm 10\%$       | 30        | 0.252                 | 50.0                                | 40                             | 0.68                       |
| EC24-222K | 2200                     | $\pm 10\%$       | 30        | 0.252                 | 54.0                                | 45                             | 0.52                       |
| EC24-272K | 2700                     | $\pm 10\%$       | 30        | 0.252                 | 61.0                                | 35                             | 0.4                        |
| EC24-332K | 3300                     | $\pm 10\%$       | 30        | 0.252                 | 68.0                                | 35                             | 0.28                       |
| EC24-392K | 3900                     | $\pm 10\%$       | 30        | 0.252                 | 74.0                                | 30                             | 0.12                       |
| EC24-472K | 4700                     | $\pm 10\%$       | 30        | 0.252                 | 80.0                                | 30                             | 0.10                       |



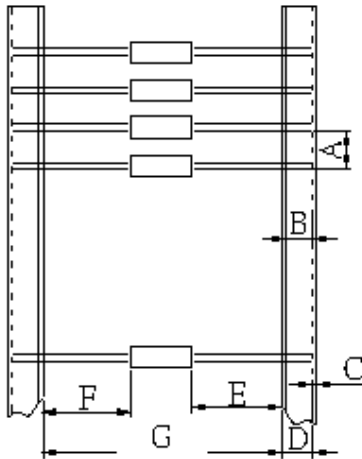
## I SELECTION GUIDE FOR STANDARD COILS

| PART NO   | INDUCTANCE<br>( $\mu$ H) | TOLERANCE<br>(%) | Q<br>MIN. | TEST<br>FREQ<br>(MHz) | DC<br>RESISTANCE<br>( $\Omega$ )MAX | RATED DC<br>CURRENT<br>(mA)MAX | S.R.F<br>FREQ<br>(MHz)MIN |
|-----------|--------------------------|------------------|-----------|-----------------------|-------------------------------------|--------------------------------|---------------------------|
| EC22-R10M | 0.10                     | $\pm 20\%$       | 50        | 25.2                  | 0.20                                | 460                            | 170                       |
| EC22-R12M | 0.12                     | $\pm 20\%$       | 35        | 25.2                  | 0.20                                | 445                            | 170                       |
| EC22-R15M | 0.15                     | $\pm 20\%$       | 35        | 25.2                  | 0.25                                | 440                            | 165                       |
| EC22-R18M | 0.18                     | $\pm 20\%$       | 35        | 25.2                  | 0.30                                | 430                            | 160                       |
| EC22-R22M | 0.22                     | $\pm 20\%$       | 35        | 25.2                  | 0.40                                | 400                            | 150                       |
| EC22-R27M | 0.27                     | $\pm 20\%$       | 35        | 25.2                  | 0.43                                | 380                            | 150                       |
| EC22-R33M | 0.33                     | $\pm 20\%$       | 35        | 25.2                  | 0.48                                | 370                            | 150                       |
| EC22-R39M | 0.39                     | $\pm 20\%$       | 35        | 25.2                  | 0.51                                | 350                            | 150                       |
| EC22-R47M | 0.47                     | $\pm 20\%$       | 35        | 25.2                  | 0.56                                | 330                            | 150                       |
| EC22-R56M | 0.56                     | $\pm 20\%$       | 35        | 25.2                  | 0.61                                | 320                            | 150                       |
| EC22-R68M | 0.68                     | $\pm 20\%$       | 35        | 25.2                  | 0.67                                | 310                            | 150                       |
| EC22-R82M | 0.82                     | $\pm 20\%$       | 35        | 25.2                  | 0.74                                | 290                            | 150                       |
| EC22-1R0K | 1.0                      | $\pm 10\%$       | 35        | 25.2                  | 0.80                                | 270                            | 150                       |
| EC22-1R2K | 1.2                      | $\pm 10\%$       | 40        | 7.96                  | 0.90                                | 260                            | 140                       |
| EC22-1R5K | 1.5                      | $\pm 10\%$       | 45        | 7.96                  | 1.00                                | 250                            | 130                       |
| EC22-1R8K | 1.8                      | $\pm 10\%$       | 45        | 7.96                  | 1.10                                | 240                            | 120                       |
| EC22-2R2K | 2.2                      | $\pm 10\%$       | 40        | 7.96                  | 1.20                                | 230                            | 100                       |
| EC22-2R7K | 2.7                      | $\pm 10\%$       | 40        | 7.96                  | 1.30                                | 220                            | 100                       |
| EC22-3R3K | 3.3                      | $\pm 10\%$       | 40        | 7.96                  | 1.40                                | 210                            | 90                        |
| EC22-3R9K | 3.9                      | $\pm 10\%$       | 40        | 7.96                  | 1.60                                | 200                            | 60                        |
| EC22-4R7K | 4.7                      | $\pm 10\%$       | 40        | 7.96                  | 1.70                                | 190                            | 50                        |
| EC22-5R6K | 5.6                      | $\pm 10\%$       | 40        | 7.96                  | 1.90                                | 180                            | 40                        |
| EC22-6R8K | 6.8                      | $\pm 10\%$       | 40        | 7.96                  | 2.20                                | 175                            | 30                        |
| EC22-8R2K | 8.2                      | $\pm 10\%$       | 40        | 7.96                  | 2.20                                | 165                            | 25                        |
| EC22-100K | 10                       | $\pm 10\%$       | 40        | 7.96                  | 2.50                                | 160                            | 20                        |
| EC22-120K | 12                       | $\pm 10\%$       | 45        | 2.52                  | 2.50                                | 150                            | 15                        |
| EC22-150K | 15                       | $\pm 10\%$       | 45        | 2.52                  | 3.10                                | 145                            | 15                        |
| EC22-180K | 18                       | $\pm 10\%$       | 45        | 2.52                  | 3.10                                | 140                            | 13                        |
| EC22-220K | 22                       | $\pm 10\%$       | 45        | 2.52                  | 3.40                                | 130                            | 9                         |
| EC22-270K | 27                       | $\pm 10\%$       | 45        | 2.52                  | 4.30                                | 125                            | 7                         |
| EC22-330K | 33                       | $\pm 10\%$       | 40        | 2.52                  | 4.70                                | 110                            | 6.0                       |
| EC22-390K | 39                       | $\pm 10\%$       | 40        | 2.52                  | 5.20                                | 115                            | 6.0                       |
| EC22-470K | 47                       | $\pm 10\%$       | 40        | 2.52                  | 5.80                                | 140                            | 6.0                       |
| EC22-560K | 56                       | $\pm 10\%$       | 60        | 2.52                  | 6.40                                | 130                            | 6.0                       |
| EC22-680K | 68                       | $\pm 10\%$       | 40        | 2.52                  | 7.20                                | 125                            | 6.5                       |
| EC22-820K | 82                       | $\pm 10\%$       | 40        | 2.52                  | 11.0                                | 95                             | 5.0                       |
| EC22-101K | 100                      | $\pm 10\%$       | 40        | 2.52                  | 12.0                                | 90                             | 4.5                       |
| EC22-121K | 120                      | $\pm 10\%$       | 35        | 0.796                 | 13.0                                | 90                             | 3.5                       |
| EC22-151K | 150                      | $\pm 10\%$       | 35        | 0.796                 | 16.0                                | 85                             | 3.5                       |
| EC22-181K | 180                      | $\pm 10\%$       | 35        | 0.796                 | 18.0                                | 80                             | 3.0                       |
| EC22-221K | 220                      | $\pm 10\%$       | 35        | 0.796                 | 20.0                                | 75                             | 3.0                       |
| EC22-271K | 270                      | $\pm 10\%$       | 35        | 0.796                 | 22.0                                | 65                             | 2.5                       |
| EC22-331K | 330                      | $\pm 10\%$       | 35        | 0.796                 | 22.0                                | 60                             | 2.5                       |



## I PACKING

### 1. TAPE SPECIFICATIONS



| TYPE | A       | B      | C      | D       | 1E-1F  | G    |
|------|---------|--------|--------|---------|--------|------|
| EC36 | 5.0±0.5 | 5.0MIN | 0.5MAX | 6.0±1.0 | 1.0MAX | 52±2 |
| EC24 | 5.0±0.5 | 5.0MIN | 0.5MAX | 6.0±1.0 | 1.0MAX | 52±2 |
| EC22 | 5.0±0.5 | 5.0MIN | 0.5MAX | 6.0±1.0 | 1.0MAX | 52±2 |