

# FLPBY series

## SMD Multilayer Ferrite Chip beads

### ◆ Features

- » Effective EMI protection
- » Low DC resistance
- » High soldering heat resistance
- » Multiple size availability



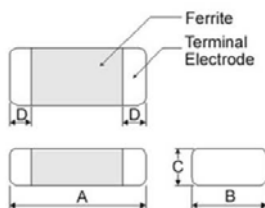
### ◆ Applications

- » Computers and Peripheral Equipment
- » VCRS, Television
- » Cellular Phones
- » Digital Communication Equipment
- » Various Electronics Equipments
- » Circuit Where a Stable Ground is Unavailable

### ◆ Dimension

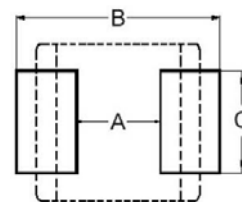
#### Shape and Dimensions

| Unit: mm    |          |           |           |           |
|-------------|----------|-----------|-----------|-----------|
| Type        | A        | B         | C         | D         |
| FLPBY040205 | 1.0±0.10 | 0.50±0.10 | 0.50±0.10 | 0.25±0.10 |
| FLPBY060308 | 1.6±0.15 | 0.8±0.15  | 0.8±0.15  | 0.3±0.20  |
| FLPBY080509 | 2.0±0.20 | 1.25±0.20 | 0.9±0.20  | 0.5±0.30  |



#### Recommended Pattern

| Unit: mm    |         |         |         |
|-------------|---------|---------|---------|
| Type        | A       | B       | C       |
| FLPBY040205 | 0.4     | 1.2~1.4 | 0.5     |
| FLPBY060308 | 0.7~0.8 | 1.8~2.0 | 0.6~0.8 |
| FLPBY080509 | 1.0~1.2 | 2.6~4.0 | 1.0~1.2 |



#### Dimension Conversion

| Unit: mm    |                 |      |
|-------------|-----------------|------|
| Type        | Dimension AxBxC | EIA  |
| FLPBY040205 | 1.0X0.5X0.5     | 0402 |
| FLPBY060308 | 1.6x0.8x0.8     | 0603 |
| FLPBY080509 | 2.0x1.2x0.9     | 0805 |

## ◆ Part Number

| FLPBY | 040205 | T       | 600        | Y         | N            |
|-------|--------|---------|------------|-----------|--------------|
| Type  | Size   | Packing | Impedance  | Tolerance | Internal No. |
| FLPBY | 040205 | Taping  | 10R: 100   | Y: ±25%   |              |
|       | 060308 |         | 30R: 100   | T: ±30%   |              |
|       | 080509 |         | 60R: 600   |           |              |
|       |        |         | 120R: 121  |           |              |
|       |        |         | 1000R: 102 |           |              |

## ◆ Electrical Specifications

### FLPBY040205

| Impedance ( $\Omega$ ) | Tolerance ( $\pm\%$ ) | Test Freq. (MHz) | DC Resistance ( $\Omega$ ) Max | Rated Current (mA) Max |
|------------------------|-----------------------|------------------|--------------------------------|------------------------|
| 10                     | 30                    | 100              | 0.03                           | 2000                   |
| 30                     | 25                    | 100              | 0.05                           | 1700                   |
| 60                     | 25                    | 100              | 0.075                          | 1500                   |
| 80                     | 25                    | 100              | 0.09                           | 1200                   |
| 120                    | 25                    | 100              | 0.09                           | 1200                   |
| 150                    | 25                    | 100              | 0.14                           | 900                    |
| 220                    | 25                    | 100              | 0.18                           | 580                    |
| 600                    | 25                    | 100              | 0.34                           | 420                    |
| 1000                   | 25                    | 100              | 0.49                           | 350                    |

Operating temp: Operating temperature range -55~+125°C

Rate current: Applied the current to coils, the temperature rise shall not be more than 30°C

Storage Temperature: Under 25°C, Humidity 40%~65%

**FLPBY060308**

| Impedance ( $\Omega$ ) | Tolerance ( $\pm\%$ ) | Test Freq. (MHz) | DC Resistance ( $\Omega$ ) Max | Rated Current (mA) Max |
|------------------------|-----------------------|------------------|--------------------------------|------------------------|
| 10                     | 30                    | 100              | 0.020                          | 4000                   |
| 25                     | 25                    | 100              | 0.030                          | 3000                   |
| 40                     | 25                    | 100              | 0.035                          | 3000                   |
| 60                     | 25                    | 100              | 0.040                          | 3000                   |
| 120                    | 25                    | 100              | 0.080                          | 2500                   |
| 150                    | 25                    | 100              | 0.085                          | 2000                   |
| 180                    | 25                    | 100              | 0.090                          | 2000                   |
| 220                    | 25                    | 100              | 0.095                          | 2000                   |
| 300                    | 25                    | 100              | 0.120                          | 1500                   |
| 470                    | 25                    | 100              | 0.150                          | 1200                   |
| 600                    | 25                    | 100              | 0.200                          | 1000                   |
| 1000                   | 25                    | 100              | 0.250                          | 800                    |
| 1200                   | 25                    | 100              | 0.250                          | 800                    |
| 1500                   | 25                    | 100              | 0.400                          | 500                    |

Operating Temp: Operating temperature range  $-55\sim+125^{\circ}\text{C}$

Rate Current: Applied the current to coils, the temperature rise shall not be more than  $30^{\circ}\text{C}$

Storage Temperature: Under  $25^{\circ}\text{C}$ , Humidity 40%~65%

**FLPBY080509**

| Impedance ( $\Omega$ ) | Tolerance ( $\pm\%$ ) | Test Freq. (MHz) | DC Resistance ( $\Omega$ ) Max | Rated Current (mA) Max |
|------------------------|-----------------------|------------------|--------------------------------|------------------------|
| 10                     | 30                    | 100              | 0.01                           | 6000                   |
| 11                     | 25                    | 100              | 0.01                           | 6000                   |
| 13                     | 25                    | 100              | 0.02                           | 5000                   |
| 15                     | 25                    | 100              | 0.02                           | 5000                   |
| 17                     | 25                    | 100              | 0.02                           | 5000                   |
| 19                     | 25                    | 100              | 0.02                           | 4000                   |
| 22                     | 25                    | 100              | 0.02                           | 4000                   |
| 26                     | 25                    | 100              | 0.02                           | 4000                   |
| 28                     | 25                    | 100              | 0.02                           | 4000                   |
| 30                     | 25                    | 100              | 0.015                          | 4000                   |
| 31                     | 25                    | 100              | 0.02                           | 4000                   |
| 32                     | 25                    | 100              | 0.02                           | 4000                   |
| 33                     | 25                    | 100              | 0.02                           | 4000                   |
| 39                     | 25                    | 100              | 0.02                           | 3000                   |
| 40                     | 25                    | 100              | 0.02                           | 3000                   |
| 42                     | 25                    | 100              | 0.025                          | 3000                   |

**FLPBY080509**

| Impedance ( $\Omega$ ) | Tolerance ( $\pm\%$ ) | Test Freq. (MHz) | DC Resistance ( $\Omega$ ) Max | Rated Current (mA) Max |
|------------------------|-----------------------|------------------|--------------------------------|------------------------|
| 50                     | 25                    | 100              | 0.025                          | 3000                   |
| 60                     | 25                    | 100              | 0.03                           | 3000                   |
| 68                     | 25                    | 100              | 0.04                           | 3000                   |
| 70                     | 25                    | 100              | 0.04                           | 3000                   |
| 75                     | 25                    | 100              | 0.04                           | 3000                   |
| 80                     | 25                    | 100              | 0.04                           | 3000                   |
| 90                     | 25                    | 100              | 0.04                           | 3000                   |
| 100                    | 25                    | 100              | 0.04                           | 3000                   |
| 120                    | 25                    | 100              | 0.04                           | 3000                   |
| 130                    | 25                    | 100              | 0.05                           | 2500                   |
| 150                    | 25                    | 100              | 0.05                           | 2500                   |
| 180                    | 25                    | 100              | 0.05                           | 2500                   |
| 200                    | 25                    | 100              | 0.05                           | 2500                   |
| 220                    | 25                    | 100              | 0.08                           | 2000                   |
| 240                    | 25                    | 100              | 0.08                           | 2000                   |
| 250                    | 25                    | 100              | 0.08                           | 2000                   |
| 300                    | 25                    | 100              | 0.08                           | 2000                   |
| 330                    | 25                    | 100              | 0.08                           | 2000                   |
| 390                    | 25                    | 100              | 0.10                           | 2000                   |
| 400                    | 25                    | 100              | 0.10                           | 2000                   |
| 450                    | 25                    | 100              | 0.10                           | 2000                   |
| 470                    | 25                    | 100              | 0.10                           | 2000                   |
| 500                    | 25                    | 100              | 0.10                           | 2000                   |
| 600                    | 25                    | 100              | 0.10                           | 2000                   |
| 750                    | 25                    | 100              | 0.12                           | 1500                   |
| 800                    | 25                    | 100              | 0.12                           | 1500                   |
| 1000                   | 25                    | 100              | 0.12                           | 1500                   |
| 1500                   | 25                    | 100              | 0.30                           | 1000                   |

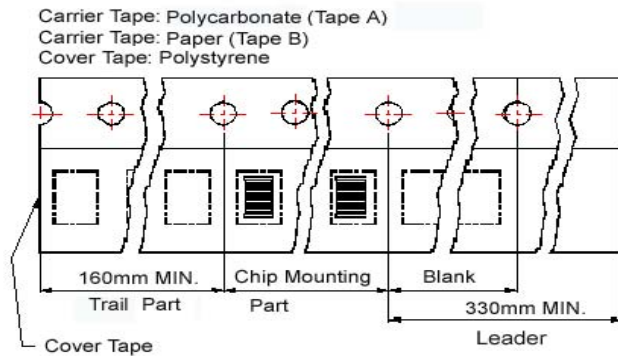
Operating Temp: Operating temperature range  $-55\sim+125^{\circ}\text{C}$

Rate Current: Applied the current to coils, the temperature rise shall not be more than  $30^{\circ}\text{C}$

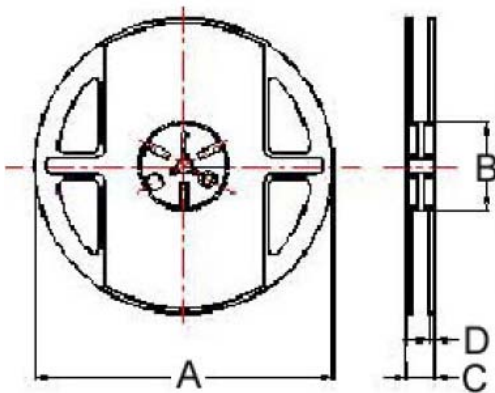
Storage Temperature: Under  $25^{\circ}\text{C}$ , Humidity 40%~65%

# Packing

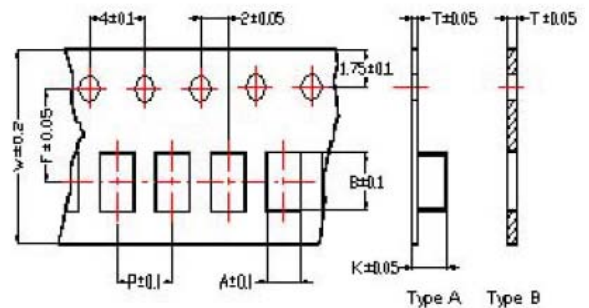
## Tape Material



## Tape Dimensions



## Reel Dimensions



## Dimensions

Unit: mm

| TYPE        | Tape Dimensions |      |      |     |     |     |   |      | Reel Dimensions |    |    |   | Quantity PCS/Reel |
|-------------|-----------------|------|------|-----|-----|-----|---|------|-----------------|----|----|---|-------------------|
|             | A               | B    | T    | W   | P   | F   | K | Tape | A               | B  | C  | D |                   |
| FLPBY040205 | 0.65            | 1.15 | 0.60 | 8.0 | 2.0 | 3.5 | - | B    | 178             | 60 | 12 | 2 | 10000             |
| FLPBY060308 | 1.05            | 1.85 | 0.95 | 8.0 | 4.0 | 3.5 | - | B    | 178             | 60 | 12 | 2 | 4000              |
| FLPBY080509 | 1.50            | 2.30 | 0.97 | 8.0 | 4.0 | 3.5 | - | B    | 178             | 60 | 12 | 2 | 4000              |

All product specification and data are subject to change without notice