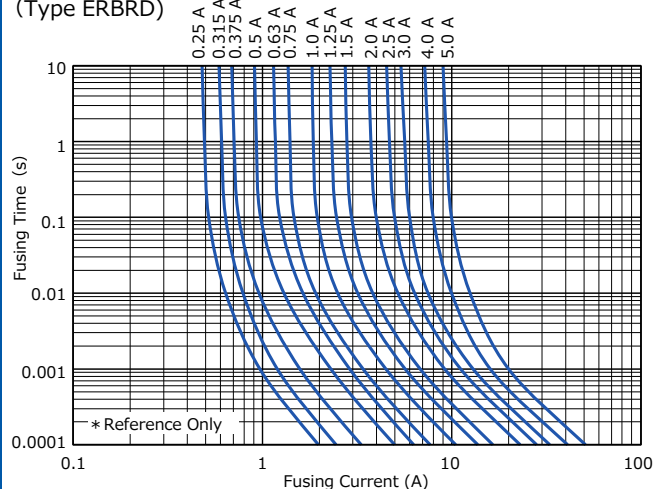


## Fusing Characteristics (25 °C typical)

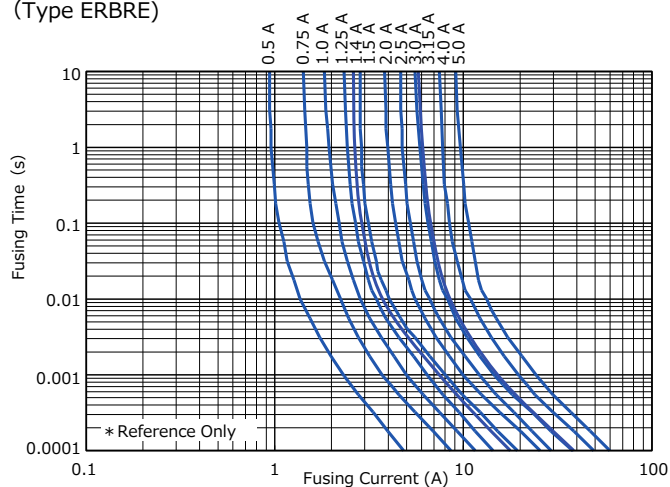
## ● 0402 inch / 1005 mm size

(Type ERBRD)



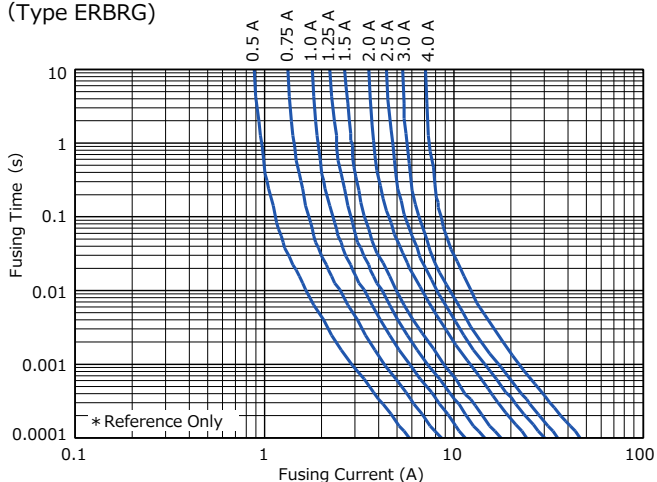
## ● 0603 inch / 1608 mm size

(Type ERBRE)



## ● 1206 inch / 3216mm size

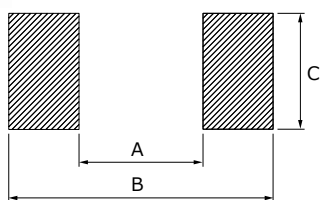
(Type ERBRG)



## Performance

| Test Item                    | Performance Requirements   | Test Conditions                                         |
|------------------------------|----------------------------|---------------------------------------------------------|
| Resistance                   | Within Specified Tolerance | 25 °C                                                   |
| Resistance to Soldering Heat | ±10 %                      | 260 °C±5 °C, 10 s                                       |
| Rapid Change of Temperature  | ±10 %                      | -40 °C (30 min.) / + 125 °C (30 min.), 5 cycles         |
| Damp Heat, Steady State      | ±10 %                      | 60 °C, 90 % to 95 %RH, 1000 h (no load)                 |
| Load Life in Humidity        | ±10 %                      | 60 °C, 90 % to 95 %RH, Load: 70 % rated current, 1000 h |
| Endurance at 70 °C           | ±10 %                      | 70 °C, Load: 70 % rated current, 1000 h                 |

## Recommended Soldering Conditions



| Part No.<br>(inch size) | Dimensions(mm) |            |            |
|-------------------------|----------------|------------|------------|
|                         | A              | B          | C          |
| ERBRD<br>(0402)         | 0.5 to 0.6     | 1.4 to 1.6 | 0.4 to 0.6 |
| ERBRE<br>(0603)         | 0.7 to 0.9     | 2.0 to 2.2 | 0.8 to 1.0 |
| ERBRG<br>(1206)         | 2.0 to 2.4     | 4.4 to 5.0 | 1.2 to 1.8 |

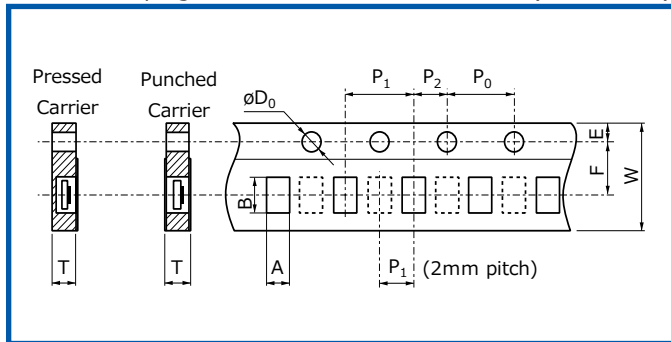
## Packaging Methods (Taping)

## ● Standard Quantity

| Part No. | Size (inch) | Kind of Taping         | Pitch (P <sub>1</sub> ) | Quantity          |
|----------|-------------|------------------------|-------------------------|-------------------|
| ERBRD    | 0402        | Pressed Carrier Taping | 2 mm                    | 10,000 pcs / reel |
| ERBRE    | 0603        | Punched Carrier Taping | 4 mm                    | 5,000 pcs / reel  |
| ERBRG    | 1206        |                        |                         |                   |

## ● Carrier Taping

(Unit : mm)

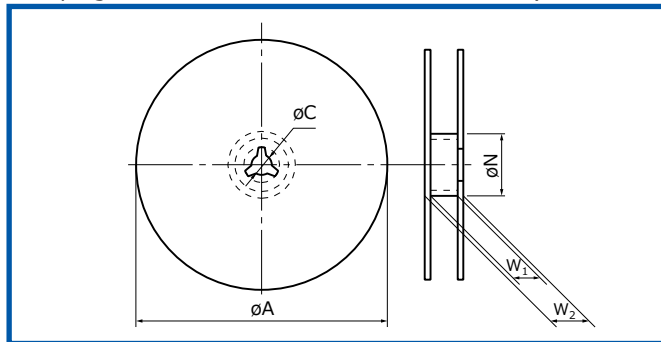


| Part No. | A          | B          | W          | F          | E          |
|----------|------------|------------|------------|------------|------------|
| ERBRD    | 0.68 ±0.10 | 1.20 ±0.10 | 8.00 ±0.20 | 3.50 ±0.05 | 1.75 ±0.10 |
| ERBRE    | 1.10 ±0.10 | 1.90 ±0.10 |            |            |            |
| ERBRG    | 2.00 ±0.15 | 3.60 ±0.20 |            |            |            |

| Part No. | P <sub>1</sub> | P <sub>2</sub> | P <sub>0</sub> | øD <sub>0</sub>                    | T          |
|----------|----------------|----------------|----------------|------------------------------------|------------|
| ERBRD    | 2.00 ±0.10     | 2.00 ±0.05     | 4.00 ±0.10     | 1.50 <sup>+0.10</sup> <sub>0</sub> | 0.67 ±0.07 |
| ERBRE    | 4.00 ±0.10     |                |                |                                    | 0.78 ±0.07 |
| ERBRG    |                |                |                |                                    | 0.84 ±0.07 |

## ● Taping Reel

(Unit : mm)



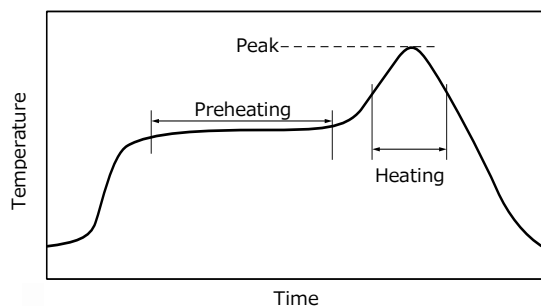
| Part No.                | øA                                 | øN                              | øC        | W <sub>1</sub>                   | W <sub>2</sub> |
|-------------------------|------------------------------------|---------------------------------|-----------|----------------------------------|----------------|
| ERBRD<br>ERBRE<br>ERBRG | 180.0 <sup>0</sup> <sub>-1.5</sub> | 60 <sup>+1.0</sup> <sub>0</sub> | 13.0 ±0.2 | 9.0 <sup>+1.0</sup> <sub>0</sub> | 11.4 ±1.0      |

## Recommended Soldering Conditions

Recommendations and precautions are described below

## ● Recommended soldering conditions for reflow

- Reflow soldering shall be performed a maximum of two times.
- Please contact us for additional information when used in conditions other than those specified.
- Please measure the temperature of the terminals and study every kind of solder and printed circuit board for solderability before actual use.



For soldering (Example : Sn/Pb)

|              | Temperature      | Time          |
|--------------|------------------|---------------|
| Preheating   | 140 °C to 160 °C | 60 s to 120 s |
| Main heating | Above 200 °C     | 30 s to 40 s  |
| Peak         | 235 ± 5 °C       | max. 10 s     |

For lead-free soldering (Example : Sn/Ag/Cu)

|              | Temperature      | Time          |
|--------------|------------------|---------------|
| Preheating   | 150 °C to 180 °C | 60 s to 120 s |
| Main heating | Above 230 °C     | 30 s to 40 s  |
| Peak         | max. 260 °C      | max. 10 s     |

## ● Recommended soldering conditions for flow

|            | For soldering    |               | For lead-free soldering |               |
|------------|------------------|---------------|-------------------------|---------------|
|            | Temperature      | Time          | Temperature             | Time          |
| Preheating | 140 °C to 160 °C | 60 s to 120 s | 150 °C to 180 °C        | 60 s to 120 s |
| Soldering  | 245±5 °C         | 20 s to 30 s  | max. 260 °C             | max. 10 s     |

《Repair with hand soldering》

- Preheat with a blast of hot air or similar method. Use a soldering iron with a tip temperature of 350 °C or less. Solder each electrode for 3 seconds or less.
- Never touch this product with the tip of a soldering iron.