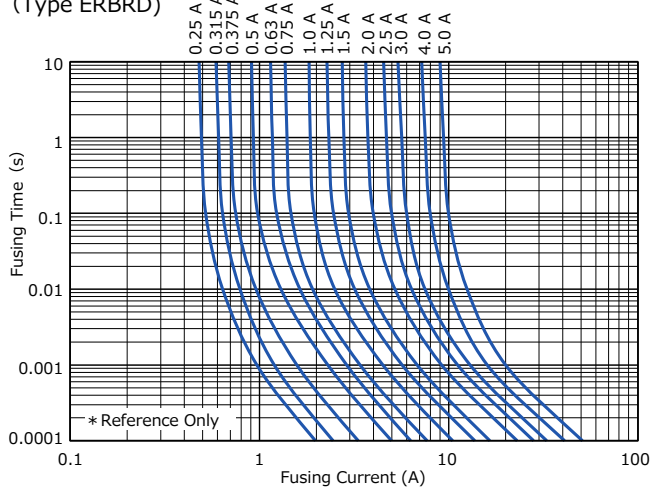


Fusing Characteristics (25 °C typical)

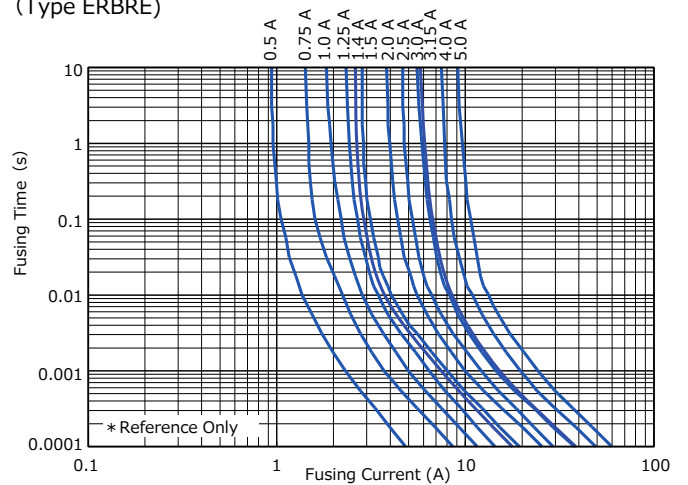
● 0402 inch / 1005 mm size

(Type ERBRD)



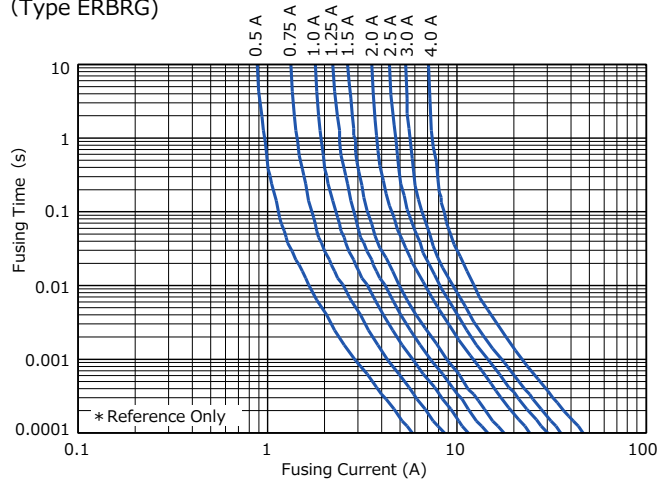
● 0603 inch / 1608 mm size

(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. (inch size) | Dimensions(mm) | | |
|-------------------------|----------------|------------|------------|
| | A | B | C |
| ERBRD (0402) | 0.5 to 0.6 | 1.4 to 1.6 | 0.4 to 0.6 |
| ERBRE (0603) | 0.7 to 0.9 | 2.0 to 2.2 | 0.8 to 1.0 |
| ERBRG (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 ₁) | 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 ₁ | P ₂ | P ₀ | ϕD_0 | T |
|----------|-----------------|-----------------|-----------------|---|-----------------|
| ERBRD | 2.00 ± 0.10 | 2.00 ± 0.05 | 4.00 ± 0.10 | 1.50 $\begin{smallmatrix} +0.10 \\ 0 \end{smallmatrix}$ | 0.67 ± 0.07 |
| ERBRE | 4.00 ± 0.10 | | | | 0.78 ± 0.07 |
| ERBRG | | | | | 0.84 ± 0.07 |

● Taping Reel (Unit : mm)



| Part No. | ϕA | ϕN | ϕC | W ₁ | W ₂ |
|----------|---|--|----------------|---|----------------|
| ERBRD | 180.0 $\begin{smallmatrix} 0 \\ -1.5 \end{smallmatrix}$ | 60 $\begin{smallmatrix} +1.0 \\ 0 \end{smallmatrix}$ | 13.0 ± 0.2 | 9.0 $\begin{smallmatrix} +1.0 \\ 0 \end{smallmatrix}$ | 11.4 ± 1.0 |
| ERBRE | | | | | |
| ERBRG | | | | | |

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 \pm 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 \pm 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.