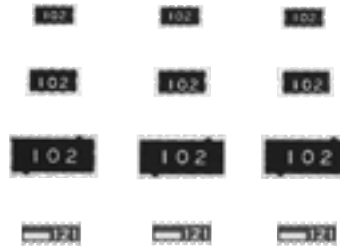


### Chip Resistor Networks

Type: **EXBD:1206**  
**EXBE:1608**  
**EXBA:2512**  
**EXBQ:1506**

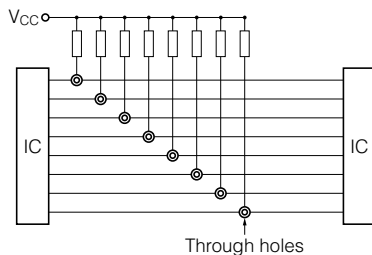


#### ■ Features

- High density placing for digital signal circuits
  - Bussed 8 or 15 resistors for pull up/down circuits
  - EXBD: 3.2 mm × 1.6 mm × 0.55 mm, 0.635 mm pitch
  - EXBE: 4.0 mm × 2.1 mm × 0.55 mm, 0.8 mm pitch
  - EXBA: 6.4 mm × 3.1 mm × 0.55 mm, 1.27 mm pitch
  - EXBQ: 3.8 mm × 1.6 mm × 0.45 mm, 0.5 mm pitch
  - Available direct placing on the bus line by means of half pitch spacing without through-holes on PWB (“High density placing” is shown below)
- High speed mounting using conventional placing machine
- Reference Standard: IEC 60115-9, JIS C 5201-9, EIAJ RC-2130
- RoHS compliant

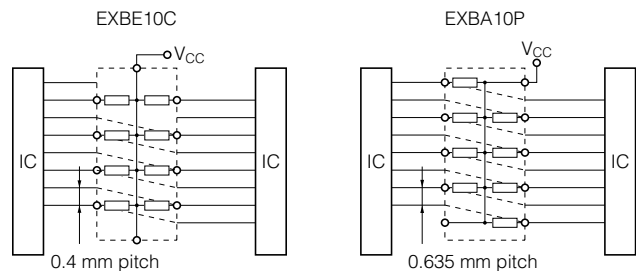
<High density placing>

Pull up resistors



No through hole

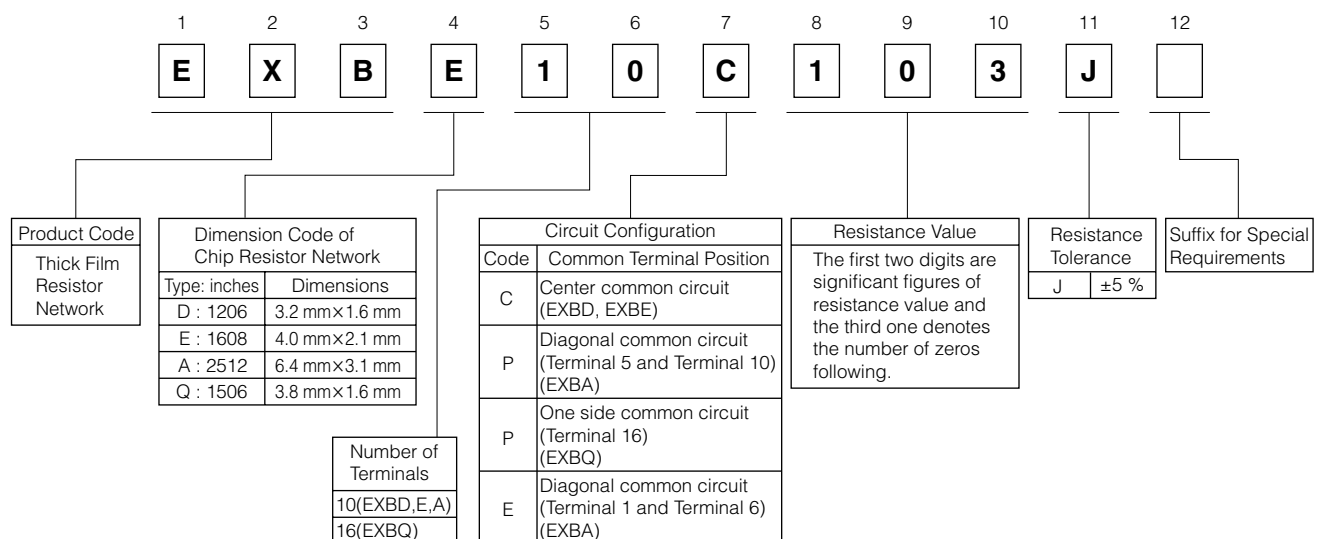
Direct placement on the bus line



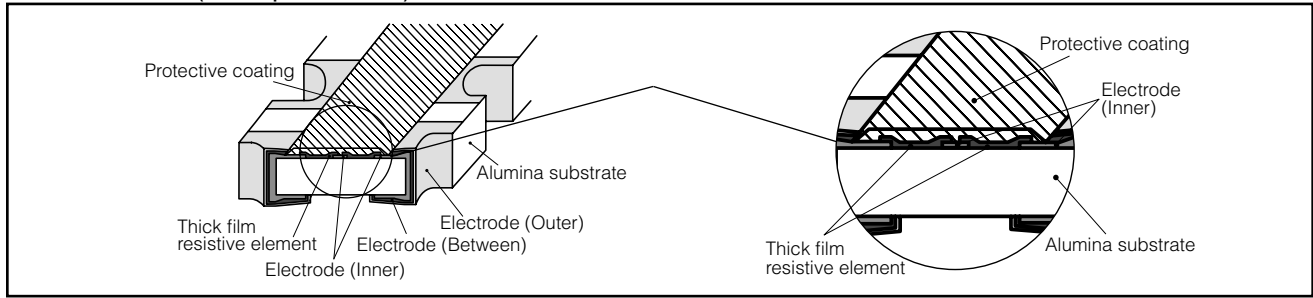
#### ■ Packaging Methods, Land Pattern, Soldering Conditions and Safety Precautions

Please see Data Files

#### ■ Explanation of Part Numbers



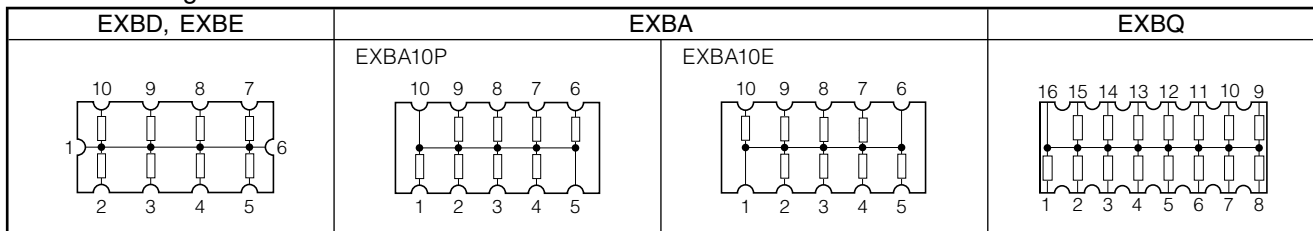
### Construction (Example : EXBD)



### Dimensions in mm (not to scale)

| EXBD                                   | EXBE                                   | EXBA                                   | EXBQ                                  |
|--|--|--|---------------------------------------|
| <p>Mass (Weight)[1000 pcs.] : 10 g</p> | <p>Mass (Weight)[1000 pcs.] : 16 g</p> | <p>Mass (Weight)[1000 pcs.] : 40 g</p> | <p>Mass (Weight)[1000 pcs.] : 9 g</p> |

### Circuit Configuration



### Ratings

| Item                                    | Specifications               |                 |       |                             |
|---|------------------------------|-----------------|-------|-----------------------------|
|   | EXBD                         | EXBE            | EXBA  | EXBQ                        |
| Series                                  | EXBD                         | EXBE            | EXBA  | EXBQ                        |
| Resistance Range                        | 47 Ω to 1 MΩ (E12)           |                 |       | 100 Ω to 470 kΩ (E6 series) |
| Resistance Tolerance                    | ±5%                          |                 |       |                             |
| Number of Terminals                     | 10 terminals                 |                 |       | 16 terminals                |
| Number of Resistors                     | 8 element                    |                 |       | 15 element                  |
| Power Rating at 70 °C                   | 0.05 W/element               | 0.063 W/element |       | 0.025 W/element             |
| Limiting Element Voltage <sup>(1)</sup> | 25V                          |                 | 50 V  | 25V                         |
| Maximum Overload Voltage <sup>(2)</sup> | 50 V                         |                 | 100 V | 50 V                        |
| T. C. R.                                | ±200 × 10 <sup>-6</sup> / °C |                 |       |                             |
| Category Temperature Range              | -55 °C to +125 °C            |                 |       |                             |

(1) Rated Continuous Working Voltage (RCWV) shall be determined from  $RCWV = \sqrt{\text{Power Rating} \times \text{Resistance Value}}$ , or Limiting Element Voltage listed above, whichever less.

(2) Overload (Short-time Overload) Test Voltage (SOTV) shall be determined from  $SOTV = 2.5 \times RCWV^*$  or Maximum Overload Voltage listed above whichever less.

### Power Derating Curve

For resistors operated in ambient temperature above 70 °C, power rating shall be derated in accordance with the figure on the right.

