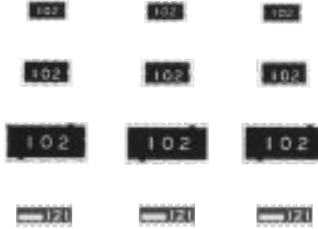


## Chip Resistor Networks

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

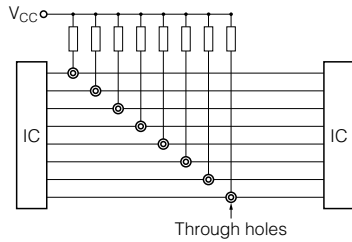


### ■ Features

- 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

<High density placing>

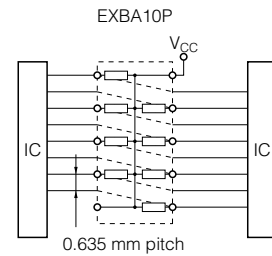
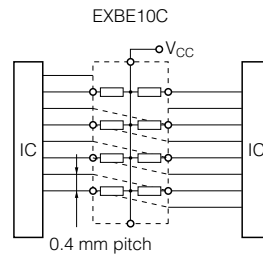
Pull up resistors



Direct placement on the bus line



No through hole



### ■ Packaging Methods

Please see Pages 40 to 43

### ■ Recommended Land Pattern

Please see Pages 44 to 45

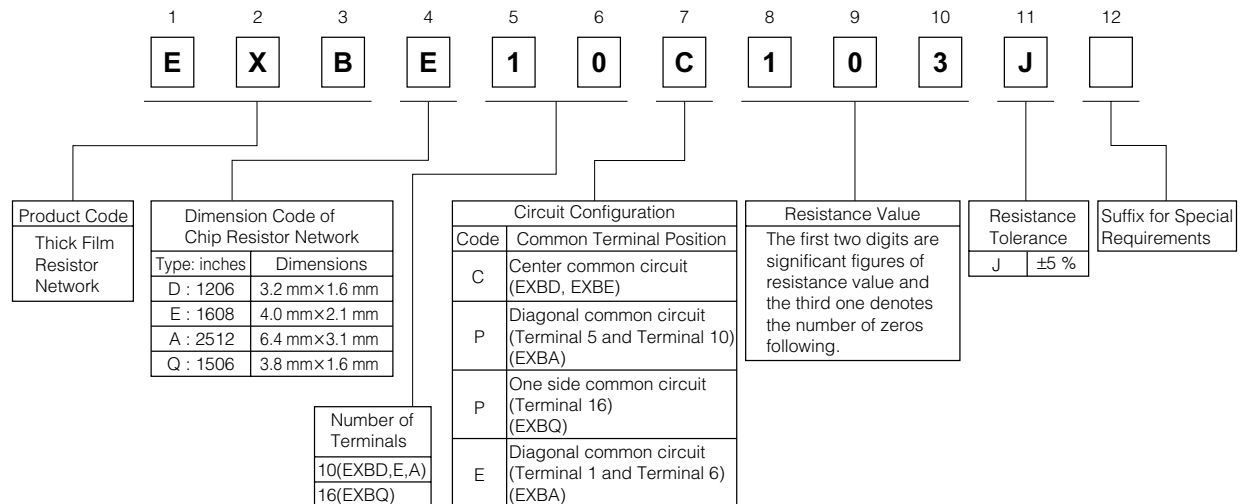
### ■ Recommended Soldering Conditions

Please see Page 46

### ■ Safety Precautions

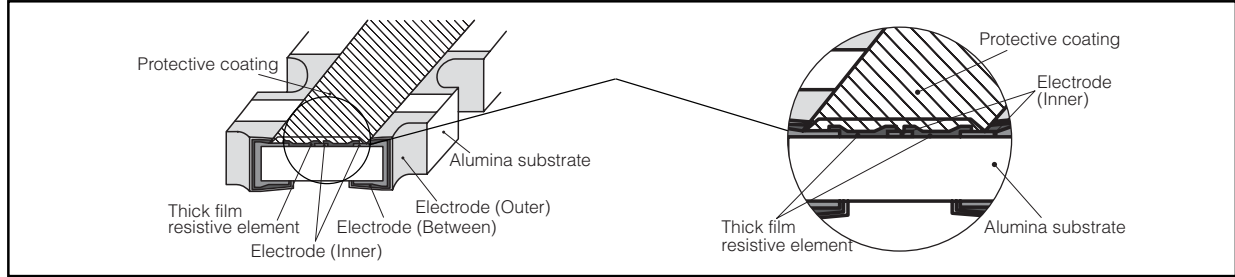
Please see Page 47

### ■ Explanation of Part Numbers



Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

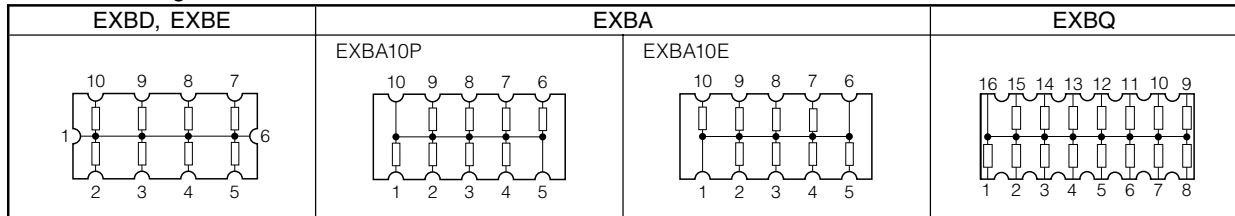
### Construction (Example : EXBD)



### 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				
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.



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