Anti-Sulfurated Chip Resistor Array

Type: EXB U24, U28, U2H, U34, U38

Features

- High resistance to sulfurization achieved by adopting an Ag-Pd-based inner electrode
- High density
  2 resistors in 1.0 mm × 1.0 mm size / 0404 inch size : EXBU24
  4 resistors in 2.0 mm × 1.0 mm size / 0804 inch size : EXBU28
  8 resistors in 3.8 mm × 1.6 mm size / 1506 inch size : EXBU2H
  2 resistors in 1.6 mm × 1.6 mm size / 0606 inch size : EXBU34
  4 resistors in 3.2 mm × 1.6 mm size / 1206 inch size : EXBU38
- Improvement of placement efficiency
  Placement efficiency of Chip Resistor Array is two, four or eight times of the flat type chip resistor
- Reference Standard···IEC 60115-9, JIS C 5201-9, EIAJ RC-2129
- AEC-Q200 qualified
- RoHS compliant

■ As for Packaging Methods, Land Pattern, Soldering Conditions and Safety Precautions, Please see Data Files

Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11
E	X	B	U	2	8	4	7	2	J	X

Product Code

Thick Film Chip Resistor Networks

Size, Construction

Code	Inch
U2	0402 Array
U3	0603 Array
Anti-Sulfuarted Convex Terminal	

No. of Terminal

4	4 Terminal
8	8 Terminal
H	16 Terminal

Resistance Value

The first two digits are significant figures of resistance value and the third one denotes the number of zeros following. Jumper is expressed by R00

Example : 222 → 2.2 kΩ

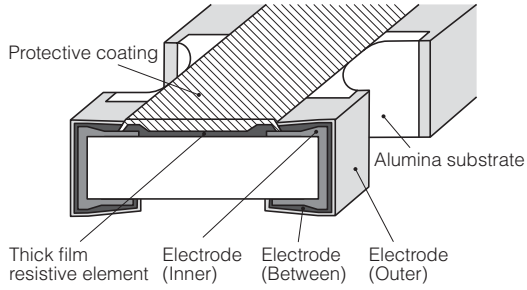
Resistance Tolerance

J	±5 %
0	Jumper

Packaging Methods

Code	Packaging	Part No.
X	Punched Carrier Taping 2 mm pitch, 10,000 pcs.	EXBU24, U28
V	Punched Carrier Taping 4 mm pitch, 5,000 pcs.	EXBU2H, U34, U38

Construction

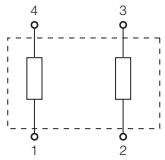


Schematics

- Isolated type

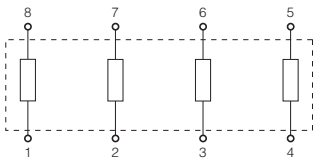
EXBU24, U34

2 resistors



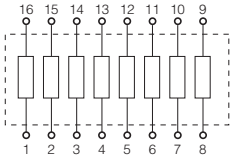
EXBU28, U38

4 resistors



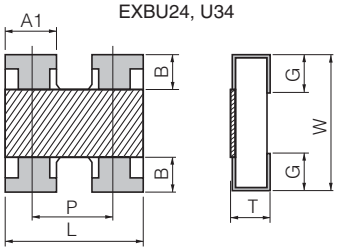
EXBU2H

8 resistors

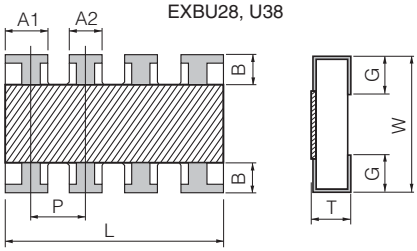


Dimensions in mm (not to scale)

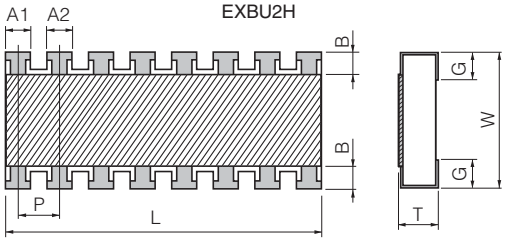
EXBU24, U34



EXBU28, U38



EXBU2H



Part No. (inch size)	Dimensions (mm)								Mass (Weight) [g/1000 pcs.]
	L	W	T	A1	A2	B	P	G	
EXBU24 (0402×2)	$1.00^{\pm0.10}$	$1.00^{\pm0.10}$	$0.35^{\pm0.10}$	$0.40^{\pm0.10}$	—	$0.18^{\pm0.10}$	(0.65)	$0.25^{\pm0.10}$	1.2
EXBU28 (0402×4)	$2.00^{\pm0.10}$	$1.00^{\pm0.10}$	$0.35^{\pm0.10}$	$0.45^{\pm0.10}$	$0.35^{\pm0.10}$	$0.20^{\pm0.10}$	(0.50)	$0.25^{\pm0.10}$	2.0
EXBU2H (0402×8)	$3.80^{\pm0.10}$	$1.60^{\pm0.10}$	$0.45^{\pm0.10}$	$0.35^{\pm0.10}$	$0.35^{\pm0.10}$	$0.30^{\pm0.10}$	(0.50)	$0.30^{\pm0.10}$	9.0
EXBU34 (0603×2)	$1.60^{\pm0.20}$	$1.60^{\pm0.15}$	$0.50^{\pm0.10}$	$0.65^{\pm0.15}$	—	$0.30^{\pm0.20}$	(0.80)	$0.30^{\pm0.20}$	3.5
EXBU38 (0603×4)	$3.20^{\pm0.20}$	$1.60^{\pm0.15}$	$0.50^{\pm0.10}$	$0.65^{\pm0.15}$	$0.45^{\pm0.15}$	$0.30^{\pm0.20}$	(0.80)	$0.35^{\pm0.20}$	7.0

( ) Reference

Ratings

Item		Specifications
Resistance Range		10 Ω to 1 MΩ E24 series
Resistance Tolerance		J: ±5 %
Number of Terminals	U24, U34	4 terminal
	U28, U38	8 terminal
	U2H	16 element
Number of Resistors	U24, U34	2 element
	U28, U38	4 element
	U2H	8 element
Power Rating at 70 °C	U24, U28, U34, U38	0.063 W/element
	U2H	0.063 W/element (0.25 W/package)

Item			Specifications
Limiting Element Voltage(1)		U2H	25 V
		U24, U28, U34, U38	50 V
Max. Overload Voltage (2)		U2H	50 V
		U24, U28, U34, U38	100 V
T.C.R.			$\pm200\times10^{-6}$/°C
Category Temperature Range			–55 °C to 125 °C
Jumper Array	Rated Current	U24, U28, U2H, U34, U38	1 A
	Max. Overload Current	U24, U28, U2H, U34, U38	2 A

(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 × RCWV or max. Overload Voltage listed above whichever less.

Power Derating Curve

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