

Chip Resistor Array

- Type: **EXB1 : 0201 Array**
EXB2 : 0402 Array
EXB3 : 0603 Array
EXBN : 0402 Array
EXBV : 0603 Array
EXBS : 0805 Array



Features

- High density
 - 2 resistors in 0.8 mm × 0.6 mm size (EXB14V)
 - 4 resistors in 1.4 mm × 0.6 mm size (EXB18V)
 - 2 resistors in 1.0 mm × 1.0 mm size (EXB24V)
 - 4 resistors in 2.0 mm × 1.0 mm size (EXB28V, N8V)
 - 8 resistors in 3.8 mm × 1.6 mm size (EXB2HV)
 - 2 resistors in 1.6 mm × 1.6 mm size (EXB34V, V4V)
 - 4 resistors in 3.2 mm × 1.6 mm size (EXB38V, V8V)
 - 4 resistors in 5.1 mm × 2.2 mm size (EXBS8V)

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

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

Explanation of Part Numbers

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

Product Code	Chip Resistor Array Type: inch	No. of Terminal	Schematics	Resistance Value	Resistance Tolerance	Packaging Methods		
Thick Film Chip Resistor Networks	1 0201 Array	4 4 Terminal	V Isolated type	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	J ±5 % 0 Jumper	Code	Packaging	Type
	2 0402 Array Convex Terminal	8 8 Terminal				Nil	Embossed Carrier Taping 4 mm pitch, 2,500 pcs.	EXBS8V
	3 0603 Array Concave Terminal	H 16 Terminal				X	Punched Carrier Taping 2 mm pitch, 10,000 pcs.	EXB14V, 18V, 24V, 28V, N8V
	N 0402 Array					V	Punched Carrier Taping 4 mm pitch, 5,000 pcs.	EXB2HV, 34V, 38V, V4V, V8V
	V 0603 Array							
	S 0805 Array							

Construction (Example : Concave Terminal)



Schematics

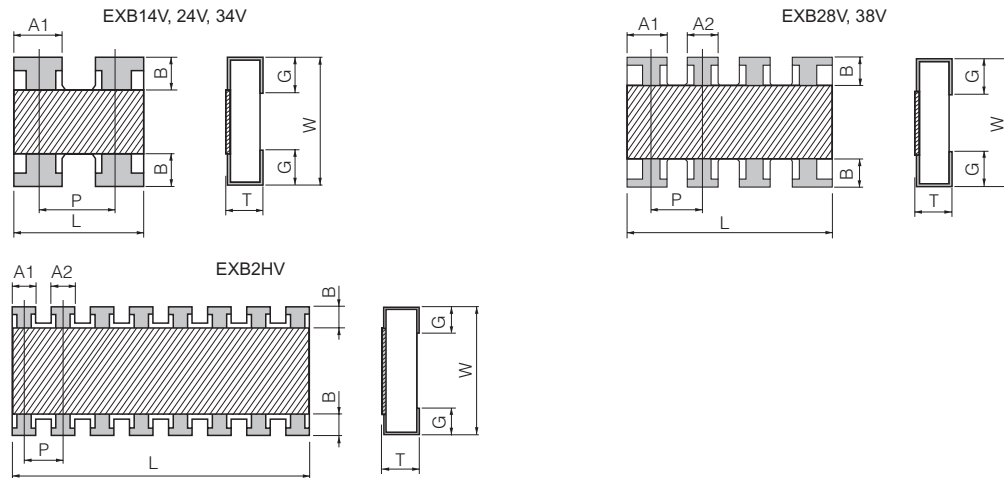
Isolated type



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.

■ Dimensions in mm (not to scale)

(1) Convex Terminal type



Type (inch size)	Dimensions (mm)								Mass (Weight) [g/1000 pcs.]
	L	W	T	A1	A2	B	P	G	
EXB14V (0201×2)	0.80 ^{±0.10}	0.60 ^{±0.10}	0.35 ^{±0.10}	0.35 ^{±0.10}	—	0.15 ^{±0.10}	(0.50)	0.15 ^{±0.10}	0.5
EXB24V (0402×2)	1.00 ^{±0.10}	1.00 ^{±0.10}	0.35 ^{±0.10}	0.40 ^{±0.10}	—	0.18 ^{±0.10}	(0.65)	0.25 ^{±0.10}	1.2
EXB28V (0402×4)	2.00 ^{±0.10}	1.00 ^{±0.10}	0.35 ^{±0.10}	0.45 ^{±0.10}	0.35 ^{±0.10}	0.20 ^{±0.10}	(0.50)	0.25 ^{±0.10}	2.0
EXB2HV (0402×8)	3.80 ^{±0.10}	1.60 ^{±0.10}	0.45 ^{±0.10}	0.35 ^{±0.10}	0.35 ^{±0.10}	0.30 ^{±0.10}	(0.50)	0.30 ^{±0.10}	9.0
EXB34V (0603×2)	1.60 ^{±0.20}	1.60 ^{±0.15}	0.50 ^{±0.10}	0.65 ^{±0.15}	—	0.30 ^{±0.20}	(0.80)	0.30 ^{±0.20}	3.5
EXB38V (0603×4)	3.20 ^{±0.20}	1.60 ^{±0.15}	0.50 ^{±0.10}	0.65 ^{±0.15}	0.45 ^{±0.15}	0.30 ^{±0.20}	(0.80)	0.35 ^{±0.20}	7.0

(2) Concave Terminal type

() Reference



Type (inch size)	Dimensions (mm)								Mass (Weight) [g/1000 pcs.]
	L	W	T	A1	A2	B	P	G	
EXBN8V (0402×4)	2.00 ^{±0.10}	1.00 ^{±0.10}	0.45 ^{±0.10}	0.30 ^{±0.10}	0.30 ^{±0.10}	0.20 ^{±0.15}	(0.50)	0.30 ^{±0.15}	3.0
EXBV4V (0603×2)	1.60 ^{+0.20/-0.10}	1.60 ^{+0.20/-0.10}	0.60 ^{±0.10}	0.60 ^{±0.10}	—	0.30 ^{±0.15}	(0.80)	0.45 ^{±0.15}	5.0
EXBV8V (0603×4)	3.20 ^{+0.20/-0.10}	1.60 ^{+0.20/-0.10}	0.60 ^{±0.10}	0.60 ^{±0.10}	0.60 ^{±0.10}	0.30 ^{±0.15}	(0.80)	0.45 ^{±0.15}	10
EXBS8V (0805×4)	5.08 ^{+0.20/-0.10}	2.20 ^{+0.20/-0.10}	0.70 ^{±0.20}	0.80 ^{±0.15}	0.80 ^{±0.15}	0.50 ^{±0.15}	(1.27)	0.55 ^{±0.15}	30

(3) Flat Terminal type

() Reference



Type (inch size)	Dimensions (mm)								Mass (Weight) [g/1000 pcs.]
	L	W	T	A1	A2	B	P	G	
EXB18V (0201×4)	1.40 ^{±0.10}	0.60 ^{±0.10}	0.35 ^{±0.10}	0.20 ^{±0.10}	0.20 ^{±0.10}	0.10 ^{±0.10}	(0.40)	0.20 ^{±0.10}	1.0

() Reference

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.

00 Sep. 2010

■ Ratings

Item		Specifications
Resistance Range		10 Ω to 1 MΩ: E24 series
Resistance Tolerance		J: ±5 %
Number of Terminals	14V,24V,V4V,34V	4 terminal
	18V,28V,N8V,38V,V8V,S8V	8 terminal
	2HV	16 terminal
Number of Resistors	14V,24V,V4V,34V	2 terminal
	18V,28V,N8V,38V,V8V,S8V	4 terminal
	2HV	8 terminal
Power Rating at 70 °C	14V,N8V	0.031 W/element
	18V	0.031 W/element (0.1 W/package)
	24V,28V,V4V,34V,V8V,38V	0.063 W/element
	S8V	0.1 W/element
	2HV	0.063 W/element (0.25 W/package)

Item		Specifications	
Limiting Element Voltage ⁽¹⁾	14V,18V	12.5 V	
	2HV	25 V	
	24V,28V,N8V,38V,34V,V4V,V8V	50 V	
Max. Over-load Voltage ⁽²⁾	S8V	100 V	
	14V,18V	25 V	
	2HV	50 V	
T.C.R.	24V,28V,N8V,38V,34V,V4V,V8V	100 V	
	S8V	200 V	
	±200×10 ⁻⁶ /°C		
Category Temperature Range		-55 °C to 125 °C	
Jumper Array	Rated Current	14V,18V	0.5 A
		2HV,24V,28V,N8V,38V,34V,V4V,V8V	1 A
		S8V	2 A
	Max. Overload Current	14V,18V	1 A
		2HV,24V,28V,N8V,38V,34V,V4V,V8V	2 A
		S8V	4 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 $SOTV = 2.5 \times \text{Power Rating}$ or max. 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.

