

## Chip Resistor Array

Type: **EXB 14V, 18V, 24V, 28V,  
N8V, 2HV, 34V, V4V,  
38V, V8V, S8V**



### Features

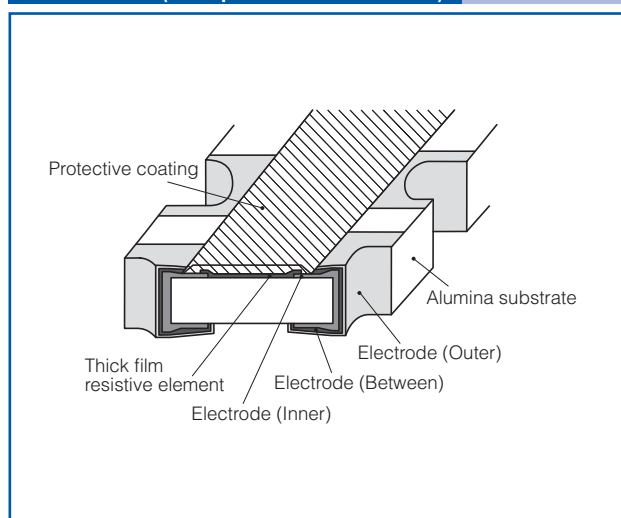
- High density  
2 resistors in 0.8 mm × 0.6 mm size / 0302 inch size : EXB14V  
4 resistors in 1.4 mm × 0.6 mm size / 0502 inch size : EXB18V  
2 resistors in 1.0 mm × 1.0 mm size / 0404 inch size : EXB24V  
4 resistors in 2.0 mm × 1.0 mm size / 0804 inch size : EXB28V, EXBN8V  
8 resistors in 3.8 mm × 1.6 mm size / 1506 inch size : EXB2HV  
2 resistors in 1.6 mm × 1.6 mm size / 0606 inch size : EXB34V, EXBV4V  
4 resistors in 3.2 mm × 1.6 mm size / 1206 inch size : EXB38V, EXBV8V  
4 resistors in 5.1 mm × 2.2 mm size / 2009 inch size : EXBS8V
- 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 (EXB2, EXB3)
- RoHS compliant

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

### Explanation of Part Numbers

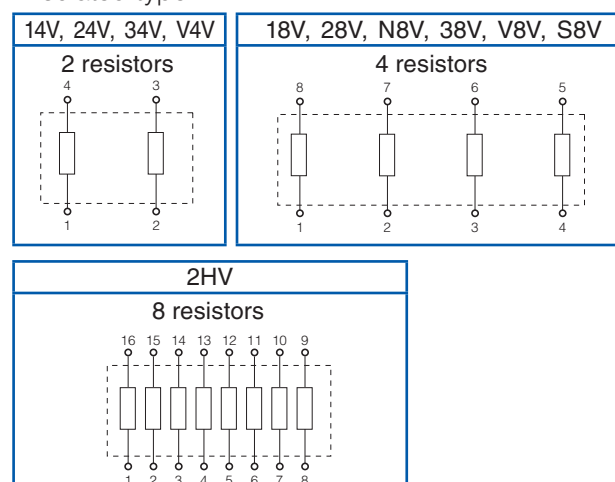
1	2	3	4	5	6	7	8	9	10	11					
E	X	B	V	8	V	4	7	2	J	V					
Product Code Thick Film Chip Resistor Networks	Size and construction			No. of Terminal		Schematics		Resistance Value		Resistance Tolerance		Packaging Methods			
	Code	Inch	Terminal type	4	4 Terminal	V	Isolated type	The first two digits are significant figures of resistance value and the third one denotes the number of zeros following. Jumper is expressed by R00  Example : 222 → 2.2 kΩ					Code	Packaging	Part No.
	1	0201 Array	Convex/ Flat Terminal	8	8 Terminal								Nil	Embossed Carrier Taping 4 mm pitch, 2,500 pcs.	EXBS8V
	2	0402 Array	Convex Terminal	H	16 Terminal								X	Punched Carrier Taping 2 mm pitch, 10,000 pcs.	EXB14V, 18V, 24V, 28V, N8V
	3	0603 Array	Concave Terminal			V	Punched Carrier Taping 4 mm pitch, 5,000 pcs.						EXB2HV, 34V, 38V, V4V, V8V		
	N	0402 Array													
V	0603 Array														
S	0805 Array														

### Construction (Example : Concave Terminal)



### Schematics

- Isolated type



## Ratings

Item		Specifications
Resistance Range		10 $\Omega$ to 1 M $\Omega$ : E24 series
Resistance Tolerance		J : $\pm 5\%$
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 element
	18V,28V,N8V,38V,V8V,S8V	4 element
	2HV	8 element
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)

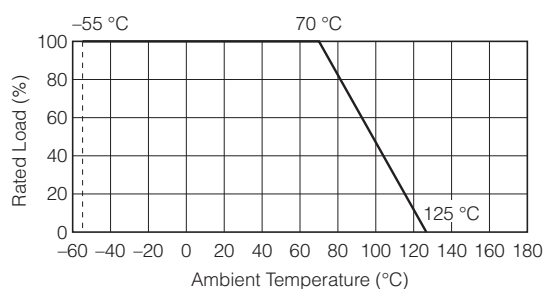
Item		Specifications	
Limiting Element Voltage <sup>(1)</sup>	14V,18V	12.5 V	
	2HV	25 V	
	24V,28V,N8V,38V,34V,V4V,V8V	50 V	
	S8V	100 V	
Maximum Overload Voltage <sup>(2)</sup>	14V,18V	25 V	
	2HV	50 V	
	24V,28V,N8V,38V,34V,V4V,V8V	100 V	
	S8V	200 V	
T.C.R.		±200×10 <sup>-6</sup> /°C	
Category Temperature 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
	Maximum 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  $\text{RCWV} = \sqrt{\text{Power Rating} \times \text{Resistance Value}}$ , or Limiting Element Voltage listed above, whichever less.

(2) Overload (Short-time Overload) Test Voltage (SOTV) shall be determined from  $\text{SOTV} = 2.5 \times \text{RCWV}$  or max. Overload Voltage listed above whichever less.

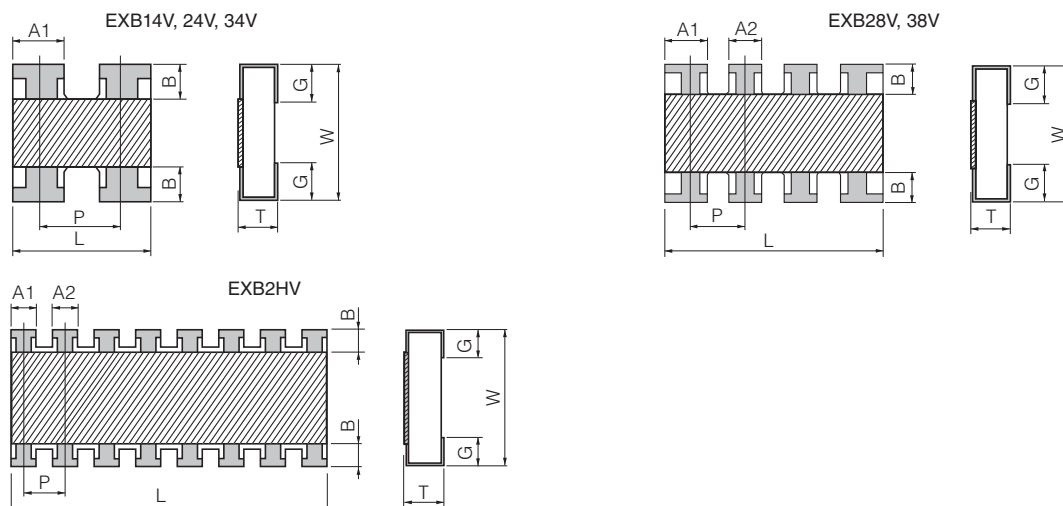
### Power Derating Curve

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



## Dimensions in mm (not to scale)

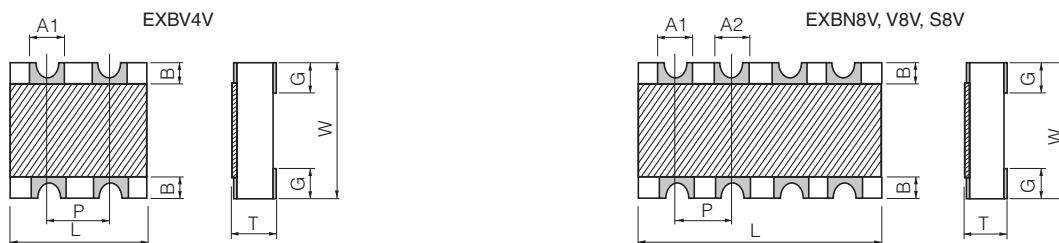
### (1) Convex Terminal type



Part No. (inch size)	Dimensions (mm)								Mass (Weight) [g/1000 pcs.]
	L	W	T	A1	A2	B	P	G	
EXB14V (0201×2)	0.80 <sup>±0.10</sup>	0.60 <sup>±0.10</sup>	0.35 <sup>±0.10</sup>	0.35 <sup>±0.10</sup>	—	0.15 <sup>±0.10</sup>	(0.50)	0.15 <sup>±0.10</sup>	0.5
EXB24V (0402×2)	1.00 <sup>±0.10</sup>	1.00 <sup>±0.10</sup>	0.35 <sup>±0.10</sup>	0.40 <sup>±0.10</sup>	—	0.18 <sup>±0.10</sup>	(0.65)	0.25 <sup>±0.10</sup>	1.2
EXB28V (0402×4)	2.00 <sup>±0.10</sup>	1.00 <sup>±0.10</sup>	0.35 <sup>±0.10</sup>	0.45 <sup>±0.10</sup>	0.35 <sup>±0.10</sup>	0.20 <sup>±0.10</sup>	(0.50)	0.25 <sup>±0.10</sup>	2.0
EXB2HV (0402×8)	3.80 <sup>±0.10</sup>	1.60 <sup>±0.10</sup>	0.45 <sup>±0.10</sup>	0.35 <sup>±0.10</sup>	0.35 <sup>±0.10</sup>	0.30 <sup>±0.10</sup>	(0.50)	0.30 <sup>±0.10</sup>	9.0
EXB34V (0603×2)	1.60 <sup>±0.20</sup>	1.60 <sup>±0.15</sup>	0.50 <sup>±0.10</sup>	0.65 <sup>±0.15</sup>	—	0.30 <sup>±0.20</sup>	(0.80)	0.30 <sup>±0.20</sup>	3.5
EXB38V (0603×4)	3.20 <sup>±0.20</sup>	1.60 <sup>±0.15</sup>	0.50 <sup>±0.10</sup>	0.65 <sup>±0.15</sup>	0.45 <sup>±0.15</sup>	0.30 <sup>±0.20</sup>	(0.80)	0.35 <sup>±0.20</sup>	7.0

( ) Reference

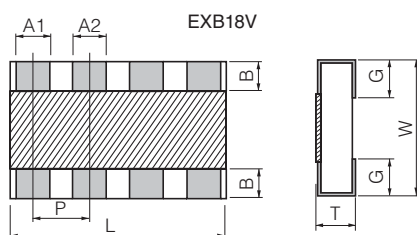
### (2) Concave Terminal type



Part No. (inch size)	Dimensions (mm)								Mass (Weight) [g/1000 pcs.]
	L	W	T	A1	A2	B	P	G	
EXBN8V (0402×4)	2.00 <sup>±0.10</sup>	1.00 <sup>±0.10</sup>	0.45 <sup>±0.10</sup>	0.30 <sup>±0.10</sup>	0.30 <sup>±0.10</sup>	0.20 <sup>±0.15</sup>	(0.50)	0.30 <sup>±0.15</sup>	3.0
EXBV4V (0603×2)	1.60 <sup>+0.20/-0.10</sup>	1.60 <sup>+0.20/-0.10</sup>	0.60 <sup>±0.10</sup>	0.60 <sup>±0.10</sup>	—	0.30 <sup>±0.15</sup>	(0.80)	0.45 <sup>±0.15</sup>	5.0
EXBV8V (0603×4)	3.20 <sup>+0.20/-0.10</sup>	1.60 <sup>+0.20/-0.10</sup>	0.60 <sup>±0.10</sup>	0.60 <sup>±0.10</sup>	0.60 <sup>±0.10</sup>	0.30 <sup>±0.15</sup>	(0.80)	0.45 <sup>±0.15</sup>	10
EXBS8V (0805×4)	5.08 <sup>+0.20/-0.10</sup>	2.20 <sup>+0.20/-0.10</sup>	0.70 <sup>±0.20</sup>	0.80 <sup>±0.15</sup>	0.80 <sup>±0.15</sup>	0.50 <sup>±0.15</sup>	(1.27)	0.55 <sup>±0.15</sup>	30

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### (3) Flat Terminal type



Part No. (inch size)	Dimensions (mm)								Mass (Weight) [g/1000 pcs.]
	L	W	T	A1	A2	B	P	G	
EXB18V (0201×4)	1.40 <sup>±0.10</sup>	0.60 <sup>±0.10</sup>	0.35 <sup>±0.10</sup>	0.20 <sup>±0.10</sup>	0.20 <sup>±0.10</sup>	0.10 <sup>±0.10</sup>	(0.40)	0.20 <sup>±0.10</sup>	1.0

( ) Reference

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