

Chip Resistor Array

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



Features

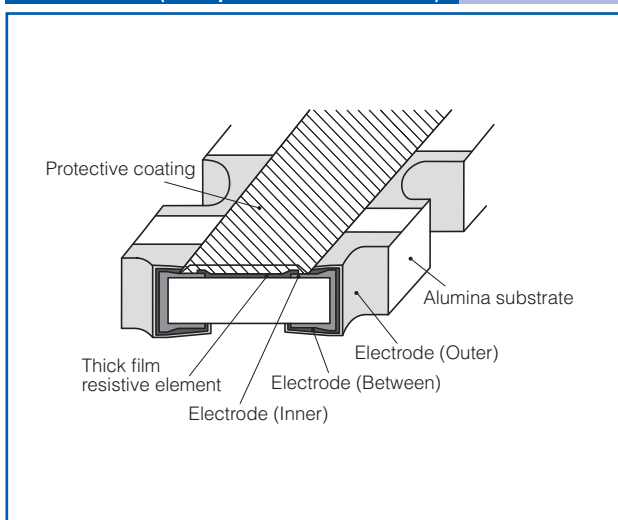
- High density
2 resistors in 0.8 mm × 0.6 mm size / 0302 inch size : EXB14V
4 resistors in 1.4 mm × 0.6 mm size / 0502 inch size : EXB18V
2 resistors in 1.0 mm × 1.0 mm size / 0404 inch size : EXB24V
4 resistors in 2.0 mm × 1.0 mm size / 0804 inch size : EXB28V, EXBN8V
8 resistors in 3.8 mm × 1.6 mm 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

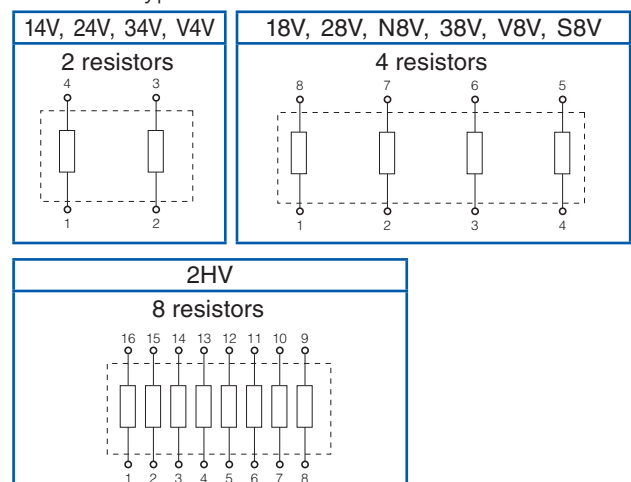
1	2	3	4	5	6	7	8	9	10	11
E	X	B	V	8	V	4	7	2	J	V
Product Code	Size and construction		No. of Terminal	Schematics	Resistance Value	Resistance Tolerance	Packaging Methods			
Thick Film Chip Resistor Networks	Code	Inch	Terminal type		The first two digits are significant figures of resistance value and the third one denotes the number of zeros following. Jumper is expressed by R00 Example : 222 → 2.2 kΩ	J ±5 % 0 Jumper	Code	Packaging	Part No.	
	1	0201 Array	Convex/Flat Terminal	4 4 Terminal 8 8 Terminal H 16 Terminal			Nil	Embossed Carrier Taping 4 mm pitch, 2,500 pcs.	EXBS8V	
	2	0402 Array	Convex 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	Concave Terminal							
	V	0603 Array	Concave Terminal							
	S	0805 Array	Concave Terminal							

Construction (Example : Concave Terminal)



Schematics

- Isolated type



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 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)

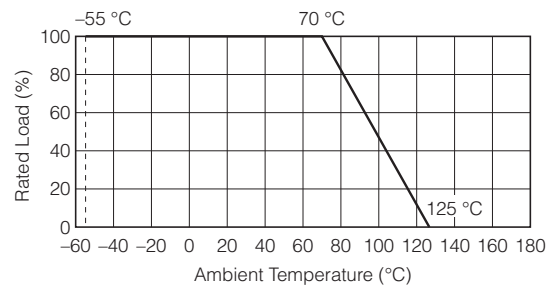
Item		Specifications	
Limiting Element Voltage ⁽¹⁾	14V,18V	12.5 V	
	2HV	25 V	
	24V,28V,N8V,38V,34V,V4V,V8V	50 V	
	S8V	100 V	
Maximum Overload Voltage ⁽²⁾	14V,18V	25 V	
	2HV	50 V	
	24V,28V,N8V,38V,34V,V4V,V8V	100 V	
	S8V	200 V	
T.C.R.		±200×10 ⁻⁶ /°C	
Category Temperature Range		-55 °C to 125 °C	
Jumper Array	Rated Current	14V,18V	0.5 A
		2HV,24V,28V,N8V,38V,34V,V4V,V8V	1 A
		S8V	2 A
	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 $RCWV = \sqrt{\text{Power Rating} \times \text{Resistance Value}}$, 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 max. Overload Voltage listed above whichever less.

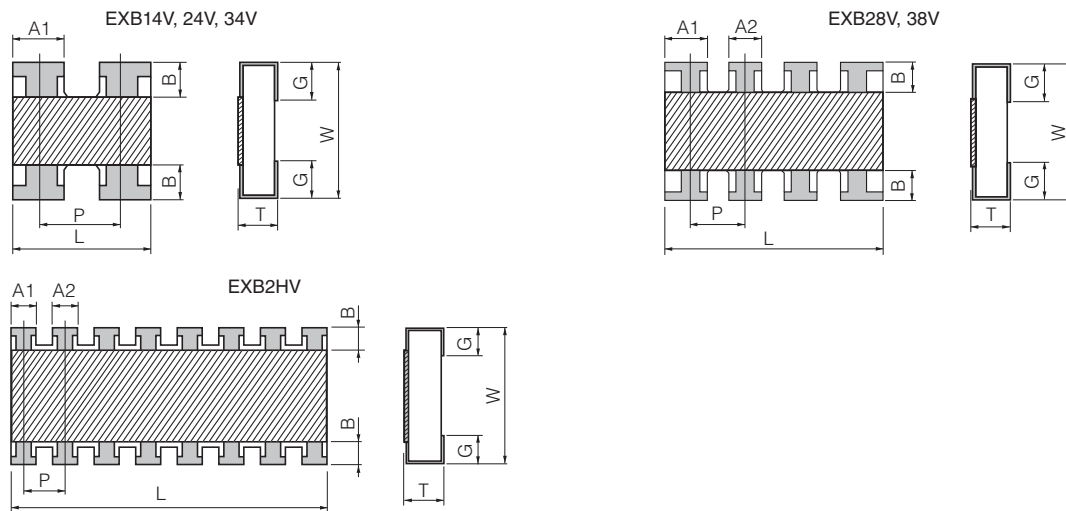
Power Derating Curve

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)

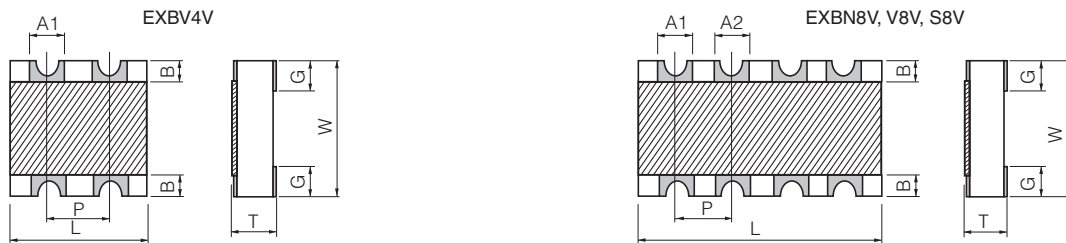
(1) Convex Terminal type



Part No. (inch size)	Dimensions (mm)								Mass (Weight) [g/1000 pcs.]
	L	W	T	A1	A2	B	P	G	
EXB14V (0201×2)	0.80 ^{±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

() Reference

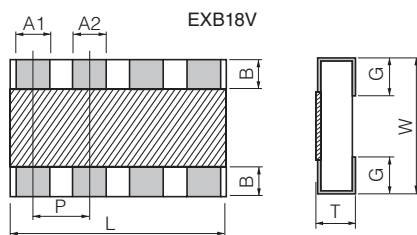
(2) Concave Terminal type



Part No. (inch size)	Dimensions (mm)								Mass (Weight) [g/1000 pcs.]
	L	W	T	A1	A2	B	P	G	
EXBN8V (0402×4)	2.00 ^{±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

() Reference

(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±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