

THIN FILM CHIP RESISTOR ARRAYS



Vishay Beyschlag

FEATURES

- Two or four resistors integrated on one substrate
- Up to 40 % space savings
- AEC-Q200 qualified models available
- 155 °C maximum film temperature
- Resistance range from 47 Ω to 221 kΩ with resistance ratio up to 1:20
- TCR tracking down to 10 ppm/K (± 5 ppm/K)
- Tolerance matching down to 0.1 % (± 0.05 %)

APPLICATIONS

- Voltage dividers
- Feedback circuits
- Bridges
- Amplifiers

MARKET SEGMENTS

- Automotive
- Industrial
- Telecom
- Consumer

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THIN FILM CHIP RESISTOR ARRAYS

Product	Model	Resistance Range	Max. Resistance Ratio	Rated Power per element at 70 °C (W)	Max. Film Temperature	Absolute TCR (ppm/K)	TCR Tracking ¹⁾ (ppm/K)	Absolute Tolerance (%)	Tolerance Matching ¹⁾ (%)
Professional Array, concave terminations	ACAC 0612	47 Ω - 221 kΩ	10:1	0.1	125 °C	± 25 / ± 50	,	± 0.5 / ± 1	-
Precision Array, concave terminations	ACAC			0.1	125 °C	± 25	10	±0.25	0.1
	0612	47 Ω - 221 kΩ	5:1			± 25	10	± 0.5	0.25
						± 25	15	± 0.25	0.1
						± 25	15	± 0.5	0.25
						± 25	25	± 0.25	0.1
						± 25	25	± 0.5	0.25
						± 50	25	± 0.5	0.5
						± 50	50	± 0.5	0.5
Professional Array, convex terminations	ACAS 0612	47 Ω - 221 kΩ	10:1	0.1	125 °C	± 25 / ± 50	-	± 0.5 / ± 1	-
Precision Array, convex terminations	ACAS 0612	47 Ω - 221 kΩ	5:1	0.1	125 °C	± 25	10	± 0.25	0.1
						± 25	10	± 0.5	0.25
						± 25	15	± 0.25	0.1
						± 25	15	± 0.5	0.25
						± 25	25	± 0.25	0.1
						± 25	25	± 0.5	0.25
						± 50	25	± 0.5	0.5
						± 50	50	± 0.5	0.5
Precision AT Array, AEC-Q200 qualified, convex terminations	ACAS		20:1	0.125	155 °C	± 25	10	± 0.25	0.1
	0606 AT ACAS 0612 AT	47 Ω - 150 kΩ				± 25	10	± 0.5	0.25
						± 25	15	± 0.25	0.1
						± 25	15	± 0.5	0.25
						± 25	25	± 0.25	0.1
						± 25	25	± 0.5	0.25
						± 50	25	± 0.5	0.5
						± 50	50	± 0.5	0.5

Note:

(1) In applications with defined resistance ratios like voltage dividers or feedback circuits, an array with a defined tracking of e.g. 10 ppm/K is required to replace discrete resistors with a temperature coefficient of resistance of ± 5 ppm/K. Furthermore, in order to achieve the same tolerance of ± 0.05 % of individual resistors, an array requires a matching tolerance of 0.1 %.

One of the World's Largest Manufacturers of Discrete Semiconductors and Passive Components

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