



THIN FILM RESISTOR ARRAYS

ACAS 0606 AT, ACAS 0612 AT Precision Series

Precision Thin Film Chip Resistor Arrays Superior Moisture Resistivity



KEY BENEFITS

- Relative TCR down to ± 5 ppm/K and relative tolerance down to ± 0.05 %
- Two or four resistor values on one substrate
- Superior moisture resistivity: < 0.5 % (85 °C; 85 % RH; 56 days)
- ESD capability: 1000 V, human body model
- AEC-Q200 qualified
- RoHS-compliant components, compatible with lead (Pb)-free and lead-bearing soldering processes

APPLICATIONS

- Precision analog circuits
- Voltage dividers
- Feedback circuits
- DC/DC converters
- Signal conditioning

RESOURCES

- Datasheet: ACAS 0606 AT, ACAS 0612 AT Precision Series - <http://www.vishay.com/doc?28770>
- For technical questions contact thinfilmmarray@vishay.com

Resistors - AEC-Q200 Qualified Array

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

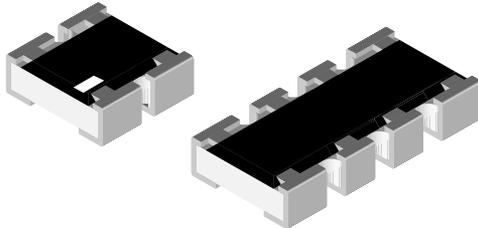




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ACAS 0606 AT and ACAS 0612 AT precision automotive grade thin film chip resistor arrays with convex terminations combine the proven reliability of discrete chip resistors with the advantages of chip resistor arrays. Defined relative tolerance (matching) and relative TCR (tracking) make this product perfectly suited for applications with outstanding requirements towards stable fixed resistor ratios. The ACAS AT is available with equal or different resistor values. Find out more about Vishay's automotive grade product requirements at: www.vishay.com/applications

FEATURES

- Superior moisture resistivity, $|\Delta R/R| < 0.5\%$ (85 °C; 85 % RH; 1000 h)
- Rated dissipation P_{70} up to 125 mW per resistor
- ESD stability 1000 V, human body model
- Relative TCR down to ± 5 ppm/K (tracking)
- Relative tolerance down to $\pm 0.05\%$ (matching)
- AEC-Q200 qualified
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



APPLICATIONS

- Precision analog circuits
- Voltage divider
- Feedback circuits
- Signal conditioning

TECHNICAL SPECIFICATIONS		
DESCRIPTION	ACAS 0606 AT	ACAS 0612 AT
EIA size	0606	0612
Metric size	RR1616M	RR1632M
Configuration, isolated	2 x 0603	4 x 0603
Design:		
All equal values (AE)	AE	AE
Two pairs of values (TP)		TP
Different values (DF)	DF	
Resistance values	47 Ω to 150 k Ω ⁽¹⁾	
Absolute tolerance	$\pm 0.1\%$	
Relative tolerance	$\pm 0.05\%$	
Absolute temperature coefficient	± 25 ppm/K; ± 15 ppm/K; ± 10 ppm/K	
Relative temperature coefficient	± 15 ppm/K; ± 10 ppm/K; ± 5 ppm/K	
Max. resistance ratio R_{min}/R_{max}	1:20	
Rated dissipation: P_{70}		
Element	0.125 W	0.125 W
Package	0.2 W	0.4 W
Operating voltage, U_{max} - AC/DC	75 V	
Operating temperature range	- 55 °C to 155 °C	
Permissible film temperature	155 °C	
Insulation voltage (U_{ins}) against ambient and between integrated resistors, continuous	75 V	

Notes

- The relative figures of tolerance, TCR and drift are related to a medial axis between the maximum and minimum permissible deviation of the resistor array. For detailed information please refer to the application note: Increasing Accuracy in Feedback Circuits and Voltage Dividers with Thin Film Chip Resistor Arrays (www.vishay.com/doc?28194)

⁽¹⁾ Resistance values to be selected from E24; E192.

Revision 11-Jan-13

Resistors - AEC-Q200 Qualified Array