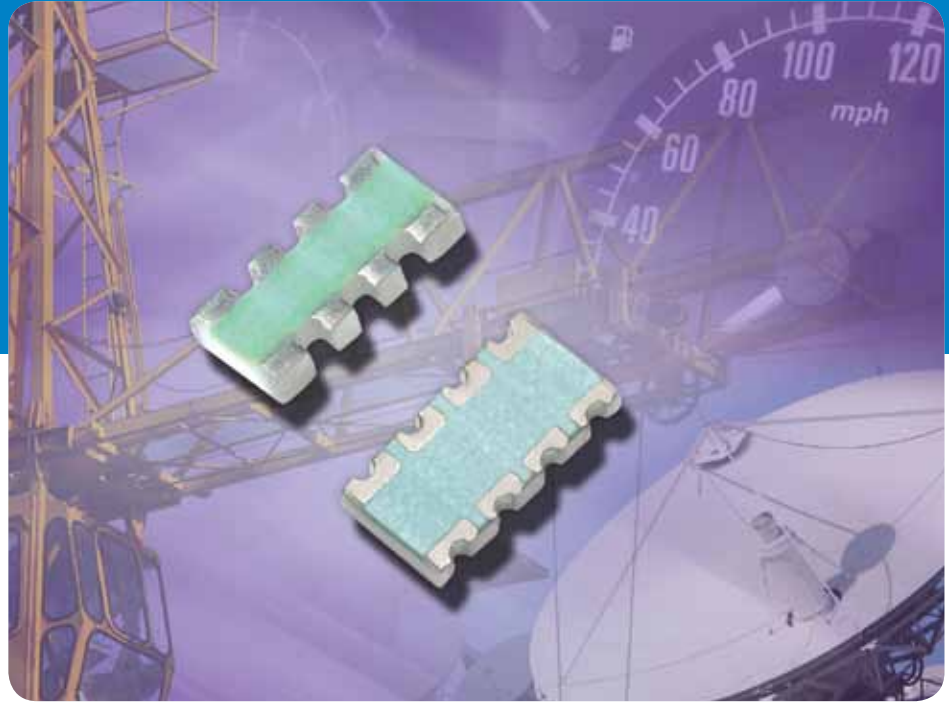




# THIN FILM CHIP RESISTOR ARRAYS

ACAC 0612 and ACAS 0612 Professional Series



## Professional Thin Film Chip Resistor Arrays

### KEY BENEFITS

- Four resistors in one package
- Two pairs or four equal resistor values
- TCR down to  $\pm 25$  ppm/K
- Tolerance down to  $\pm 0.5$  %
- Up to 40 % space savings and reduced placement costs
- Pure Sn termination on Ni barrier layer
- Compliant to RoHS directive 2002/95/EC

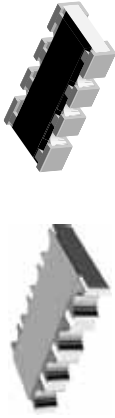
### APPLICATIONS

- Voltage dividers
- Feedback circuits
- Signal conditioning
- Measurement bridges
- DC/DC converters
- Power supplies

## Professional Thin Film Chip Resistor Array

### FEATURES

- Advanced thin film technology
- Two pairs or four equal resistor values
- TCR down to  $\pm 25$  ppm/K
- Tolerance down to  $\pm 0.5$  %
- Pure Sn termination on Ni barrier layer
- Compliant to RoHS directive 2002/95/EC



ACAC 0612 (concave terminations) and ACAS 0612 (convex terminations) thin film chip resistor arrays combine the proven reliability of professional thin film chip resistor products with the advantages of chip resistor arrays. A small package enables the design of high density circuits in combination with reduction of assembly costs. Four equal resistor values or two pairs are available.

### APPLICATIONS

- Voltage divider
- Feedback circuits
- Signal conditioning

### TECHNICAL SPECIFICATIONS

DESCRIPTION	ACAC 0612, ACAS 0612
EIA size	0612
Metric size	RR 1632M
Configuration, isolated	4 x 0603
Design:	AE
All Equal	TP
Two Pairs	
Resistance values	47 $\Omega$ to 221 k $\Omega$ (1)
Absolute tolerance (2)	$\pm 1$ %, $\pm 0.5$ %
Absolute temperature coefficient (2)	$\pm 50$ ppm/K; $\pm 25$ ppm/K
Max. resistance ratio $R_{\text{max}}/R_{\text{min}}$	1:10
Rated dissipation: $P_{70}$ (3)	0.1 W
Element	0.3 W
Package, 4 x 0603	75 V
Operating voltage	125 °C
Permissible film temperature	75 V
Insulation voltage ( $U_{\text{ins}}$ ) against ambient and between isolated resistors, continuous	

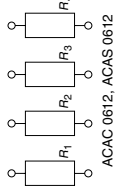
#### Notes

- (1) Resistance values to be selected from E24 and E96
- (2) For TCR tracking, tolerance matching and tighter absolute tolerance please refer to data sheet ACAC 0612, ACAS 0612 - Precision available on our web site at [www.vishay.com/doc228751](http://www.vishay.com/doc228751)
- (3) The power dissipation on the resistor generates a temperature rise against the local ambient, depending on the heat flow support of the printed-circuit board (thermal resistance). The rated dissipation applies only if the permitted film temperature is not exceeded. These resistors do not feature a limited lifetime when operated within the permissible limits.

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For technical questions, contact [rf3resistors@vishay.com](mailto:rf3resistors@vishay.com)

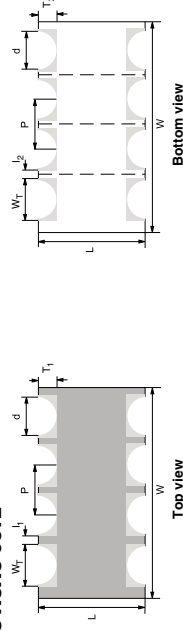
### SKETCHES



ACAC 0612, ACAS 0612

DESIGN	ACAC 0612, ACAS 0612
TYPE	AE
TP	
	$R_1 = R_2 = R_3 = R_4$
	$R_1 = R_2 < R_3 = R_4$

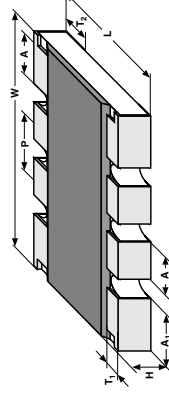
### DIMENSIONS ACAC 0612



### DIMENSIONS - Chip resistor array, mass and relevant physical dimensions

TYPE	L (mm)	W (mm)	H (mm)	P (mm)	W <sub>R</sub> (mm)	T <sub>1</sub> (mm)	T <sub>2</sub> (mm)	d (mm)	I <sub>1</sub> (mm)	I <sub>2</sub> (mm)	MASS (mg)
ACAC 0612	1.6 $\pm$ 0.15	3.2 $\pm$ 0.15	0.55 $\pm$ 0.1	0.8 $\pm$ 0.1	0.5 $\pm$ 0.15	0.3 $\pm$ 0.15	0.4 $\pm$ 0.15	0.3 $\pm$ 0.1	min. 0.15	min. 0.25	9.6

### DIMENSIONS ACAS 0612



### DIMENSIONS - Chip resistor array, mass and relevant physical dimensions

TYPE	L (mm)	W (mm)	H (mm)	P (mm)	A <sub>1</sub> (mm)	A (mm)	T <sub>1</sub> (mm)	T <sub>2</sub> (mm)	MASS (mg)
ACAS 0612	1.5 $\pm$ 0.15	3.2 $\pm$ 0.15	0.45 $\pm$ 0.1	0.8 $\pm$ 0.1	0.6 $\pm$ 0.1	0.4 $\pm$ 0.1	0.3 $\pm$ 0.15	0.4 $\pm$ 0.15	6.6

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