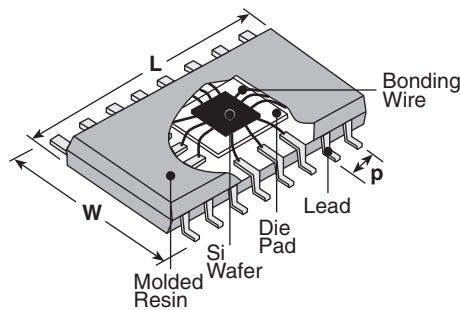


features

- Thin film on silicon
- Electrical and mechanical stability
- High integration
- Products with lead-free terminations meet EU RoHS and China RoHS requirements



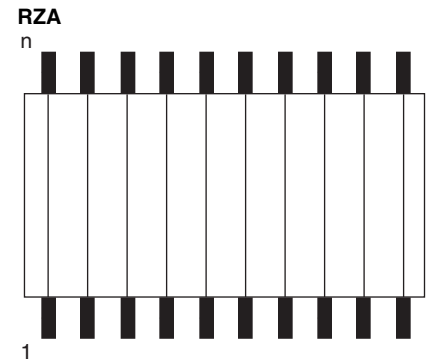
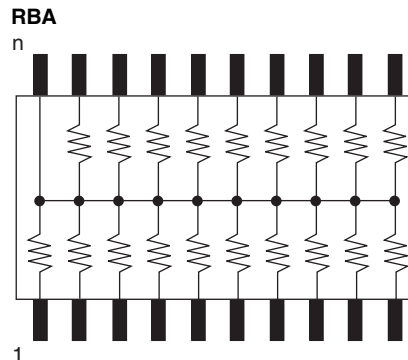
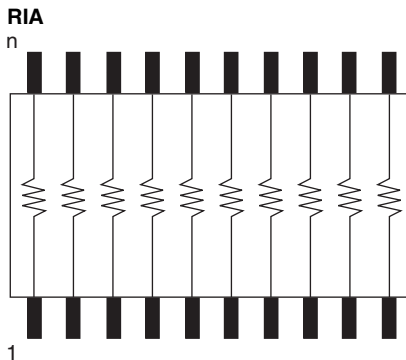
dimensions and construction



Size Code	Dimensions inches (mm)		
	L	W	p
Q16	.193 (4.90)	.236 (5.99)	.025 (0.635)
Q20	.341 (8.66)	.236 (5.99)	.025 (0.635)
Q24	.341 (8.66)	.236 (5.99)	.025 (0.635)
Q28	.39 (9.9)	.236 (5.99)	.025 (0.635)

Size Code	Dimensions inches (mm)		
	L	W	p
N08	.190 (4.83)	.236 (5.99)	.050 (1.27)
N14	.341 (8.66)	.236 (5.99)	.050 (1.27)
N16	.390 (9.91)	.236 (5.99)	.050 (1.27)

circuit schematic



n = number of pins (16, 20, 24 and 28)

ordering information

New Part #	RIA	Q20	T	TEB	1002	B	H	B	T
	Type	Package Symbol	Termination Material	Packaging	Nominal Resistance	Absolute Tolerance	T.C.R.	Relative Res. Toler.	T.C.R. Tracking
	RIA RBA RZA*	Reference above table	T: Sn (Other termination styles available, contact factory for options)	TEB: 13" embossed plastic	B, C, D, F: 4 digits G, J: 3 digits	B: ±0.1% C: ±0.25% D: ±0.5% F: ±1% G: ±2% J: ±5%	T: ±10 E: ±25 C: ±50 H: ±100	A: ±0.05% B: ±0.1% C: ±0.25% D: ±0.5% F: ±1% G: ±2%	Y: ±05 T: ±10 E: ±25 C: ±50

* Example of New Part # for RZA: RZAQ20TTEB

For further information on packaging, please refer to Appendix A.

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

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applications and ratings

Part Designation	T.C.R. (ppm/°C)	Resistance Range	Absolute Resistance Tolerance	Relative Resistance Tolerance	Tracking T.C.R. (ppm/°C)	Operating Temperature Range**
RIA, RBA	±10,±25,±50,±100*	10Ω - 510KΩ	±0.1% ~ ±5%	±0.05% ~ ±2%	±5,±10,±25,±50	-55°C to +125°C

*For special tolerance and T.C.R. requests, please contact KOA Engineering

** For custom Operating Temperature Range -55°C to +155°C, please contact factory.

electrical characteristics

Package	QSOP				SOIC		
Package Symbol	Q16	Q20	Q24	Q28	N08	N14	N16
Power Rating	0.8W	1.0W	1.0W	1.0W	0.4W	0.6W	0.8W
Resistance Range	10Ω ~ 1kΩ	Power rating 200mW/resistor element *2					
	1.1kΩ	Power rating 50mW/resistor element *2					
Max. Working Voltage	100V						
Rated Voltage	√ Rated power x nominal resistance value, rated voltage should not exceed max. working voltage						
Rated Ambient Temp.	+70°C						

*2 Above rating is based on the thermal resistance using multi-layer circuit board (EIA/JESD51). For mounting on a mono-layer board, power derating shall be needed. Total power consumption of all elements should not exceed the package power rating.

resistance ranges

Product Code	Number of Pins	T.C.R.	Resistance Range (Ω) (E24) and Resistance Tolerance				
			B: ±0.1%	C: ±0.25%	D: ±0.05%	F: ±1%	G: ±2%, J: ±5%
RIA	8, 14, 16	T: ±10	510Ω ~ 100kΩ			510Ω ~ 100kΩ	
		E: ±25				100Ω ~ 510KΩ	
		C: ±50				51Ω ~ 510KΩ	
		H: ±100				51Ω ~ 510KΩ	30Ω ~ 510KΩ
	20, 24	T: ±10				510Ω ~ 100kΩ	
		E: ±25				100Ω ~ 100KΩ	
		C: ±50				51Ω ~ 100KΩ	
		H: ±100				51Ω ~ 100KΩ	30Ω ~ 100KΩ
RBA	8, 14, 16, 20, 24	E: ±25	—	—	100Ω ~ 100KΩ		
		C: ±50			51Ω ~ 100KΩ		
		H: ±100			30Ω ~ 100KΩ	10Ω ~ 100KΩ	