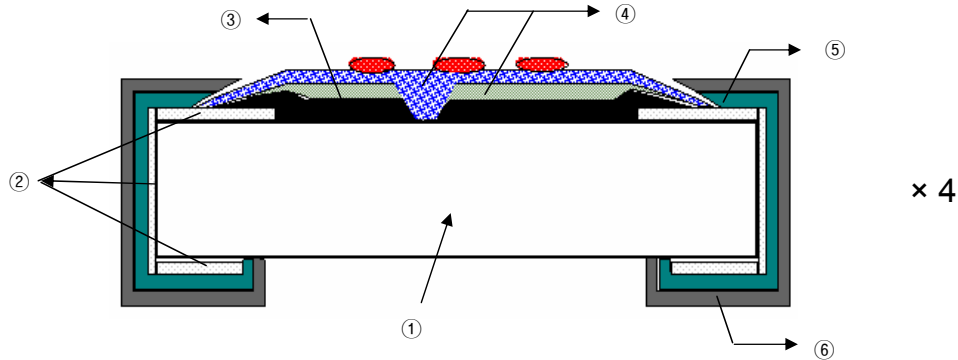


CRN10-4 Chip Resistor Arrays Material Composition

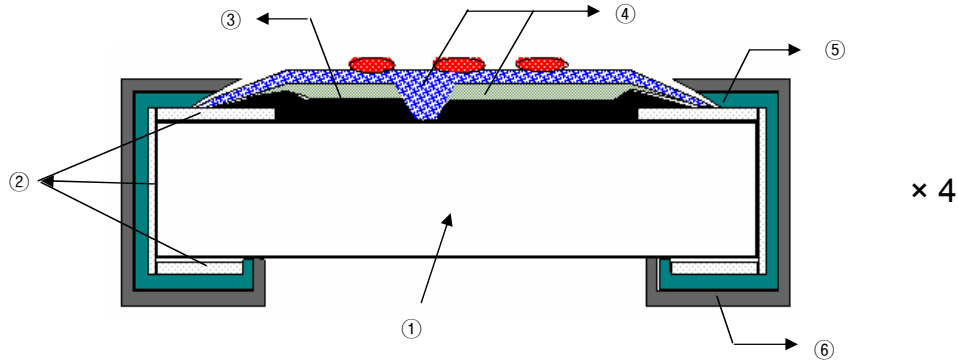


*The color of the chip resistor array shown is different from actual product.

This statement pertains to the following directive: 2002/95/EC of the European Parliament and of the Council of the European Union of January 27, 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment regarding Article 4 and its subsequent annex on the exemption of lead in glass. No. 5 in the annex states that lead in glass of cathode ray tubes, electronic components and fluorescent tubes are exempt from RoHS requirements. Therefore any lead oxide in glass of any size chip resistor array is exempt and all chip resistor arrays meet RoHS requirements.

							* Average Data	
Part Name	Material	% of total Wt.	Substance Name	% of total Wt.	CAS No.	wt%	Mass mg	
CRN10-4	① Substrate	88.5	Aluminium oxide	97.13	1344-28-1	85.98	1.995	
			Silicon dioxide	2.87	7631-86-9	2.54	0.059	
	② Conductor layer	4.3	Silver	59.00	7440-22-4	2.54	0.059	
			Palladium	4.00	7440-05-3	0.17	0.004	
			Lead oxide	26.00	1317-36-8	1.12	0.026	
			Silicon dioxide	6.00	7631-86-9	0.26	0.006	
			Boron trioxide	5.00	1303-86-2	0.22	0.005	
			Aluminium oxide	1.10	1344-28-1	0.01	0.000	
	③ Resistive layer	0.8	Ruthenium oxide	38.46	12036-10-1	0.30	0.007	
			Lead oxide	49.45	1317-36-8	0.39	0.009	
			Silicon dioxide	5.49	7631-86-9	0.04	0.001	
			Boron trioxide	5.49	1303-86-2	0.04	0.001	
			Aluminium oxide	1.10	1344-28-1	0.01	0.000	
	④ Coating layer	2.8	Lead oxide	64.62	1317-36-8	1.81	0.042	
			Silicon dioxide	21.54	7631-86-9	0.60	0.014	
			Boron trioxide	9.23	1303-86-2	0.26	0.006	
			Aluminium oxide	4.62	1344-28-1	0.13	0.003	
	⑤ Plating Ni	1.5	Nickel	100.00	7440-02-0	1.47	0.034	
⑥ Plating Sn	2.1	Tin	100.00	7440-31-5	2.11	0.049		
* All of the above are approximate values calculated by the component parts of the material.						100.000	2.320	

CRN16-4 Chip Resistor Arrays Material Composition



*The color of the chip resistor array shown is different from actual product.

This statement pertains to the following directive: 2002/95/EC of the European Parliament and of the Council of the European Union of January 27, 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment regarding Article 4 and its subsequent annex on the exemption of lead in glass. No. 5 in the annex states that lead in glass of cathode ray tubes, electronic components and fluorescent tubes are exempt from RoHS requirements. Therefore any lead oxide in glass of any size chip resistor array is exempt and all chip resistor arrays meet RoHS requirements.

							* Average Data	
Part Name	Material	% of total Wt.	Substance Name	% of total Wt.	CAS No.	wt%	Mass mg	
CRN16-4	① Substrate	88.5	Aluminium oxide	97.13	1344-28-1	85.92	7.595	
			Silicon dioxide	2.87	7631-86-9	2.54	0.225	
	② Conductor layer	4.3	Silver	58.99	7440-22-4	2.56	0.226	
			Palladium	4.38	7440-05-3	0.19	0.017	
			Lead oxide	26.27	1317-36-8	1.14	0.101	
			Silicon dioxide	5.53	7631-86-9	0.24	0.021	
			Boron trioxide	4.84	1303-86-2	0.21	0.019	
			Aluminium oxide	1.25	1344-28-1	0.01	0.001	
	③ Resistive layer	0.8	Ruthenium oxide	40.00	12036-10-1	0.32	0.028	
			Lead oxide	47.50	1317-36-8	0.38	0.034	
			Silicon dioxide	7.50	7631-86-9	0.06	0.005	
			Boron trioxide	3.75	1303-86-2	0.03	0.003	
			Aluminium oxide	1.25	1344-28-1	0.01	0.001	
	④ Coating layer	2.8	Lead oxide	64.06	1317-36-8	1.80	0.159	
			Silicon dioxide	21.00	7631-86-9	0.59	0.052	
			Boron trioxide	9.61	1303-86-2	0.27	0.024	
			Aluminium oxide	5.34	1344-28-1	0.15	0.013	
⑤ Plating Ni	1.5	Nickel	100.00	7440-02-0	1.48	0.131		
⑥ Plating Sn	2.1	Tin	100.00	7440-31-5	2.11	0.187		
* All of the above are approximate values calculated by the component parts of the material.						100.000	8.840	