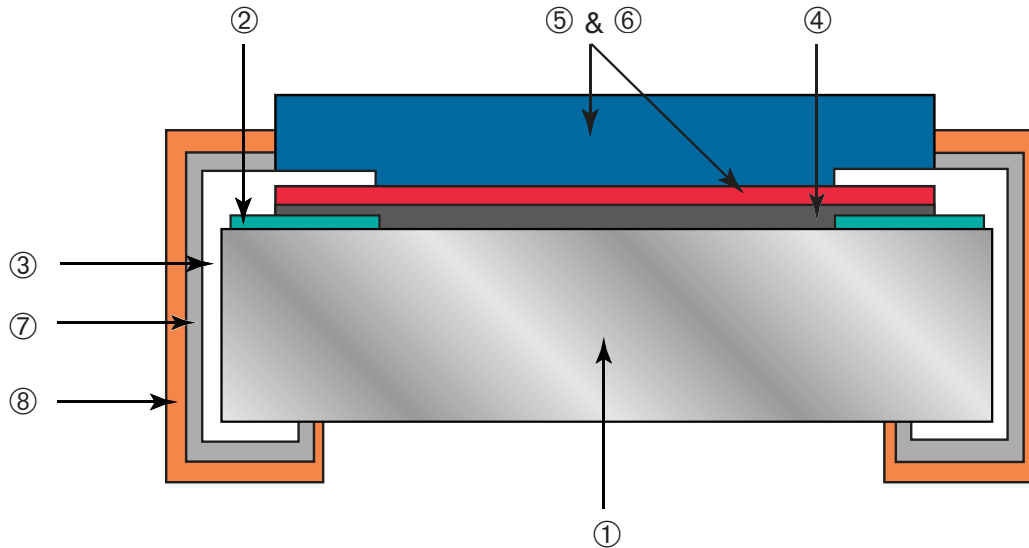


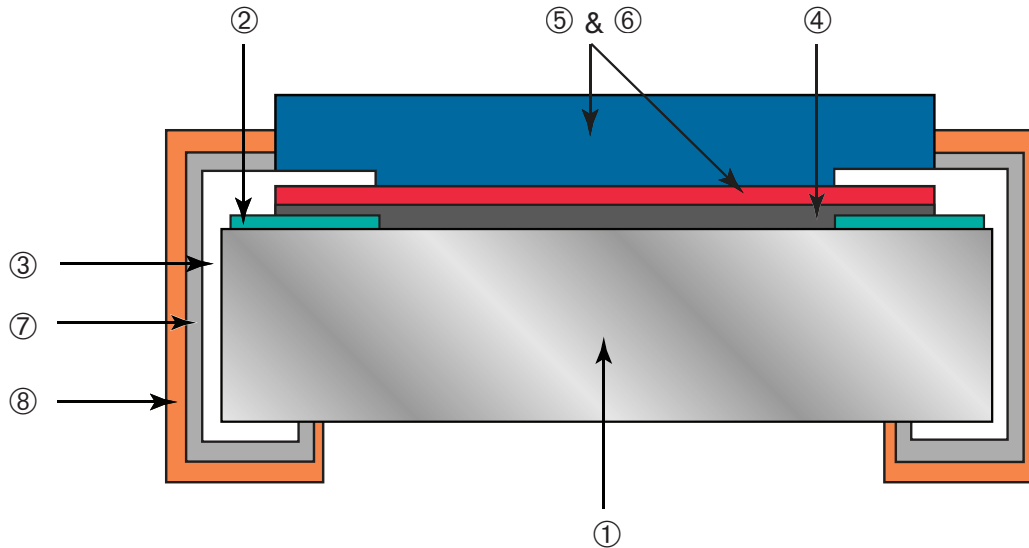
0402 Rectangular Thin Film Chip Resistor Material Composition



No.	Items	Materials
①	Substrate	Alumina
②	Base Terminal	Gold (Au) film
③	Inner Terminal	Thick film of Silver (Ag)
④	Resistive Element	Nickel Chromium (Ni-Cr)
⑤ & ⑥	Protective Coating	Resin
⑦	1st Plating	Nickel (Ni) plating
⑧	2nd Plating	100% matte Tin (Sn)

Part Name	Material	% of total Wt.	Substance	% of total Wt.	CAS No.
TFCR0402 0.6 mg	Substrate	90	Aluminium oxide	97	1344-28-1
			Silicon dioxide	3	7631-85-9
	Base & Inner Terminal	2.5	Gold	8	7440-57-5
			Silver	72	7440-22-4
			Resin (epoxy/phenol)	20	-
	Resistive Element	1	Nickel	50	7440-02-0
			Chromium	50	7440-47-3
	Protective Coating	2	Phenol resin	30	9003-35-4
			Bisphenol A epoxy resin	30	25068-38-6
			Inorganic filler	35	14807-96-6
			Organic pigment	5	147-14-8
	1st Plating	2.3	Nickel	100	7440-02-0
	2nd Plating	2.2	100% matte Tin	100	7440-31-5

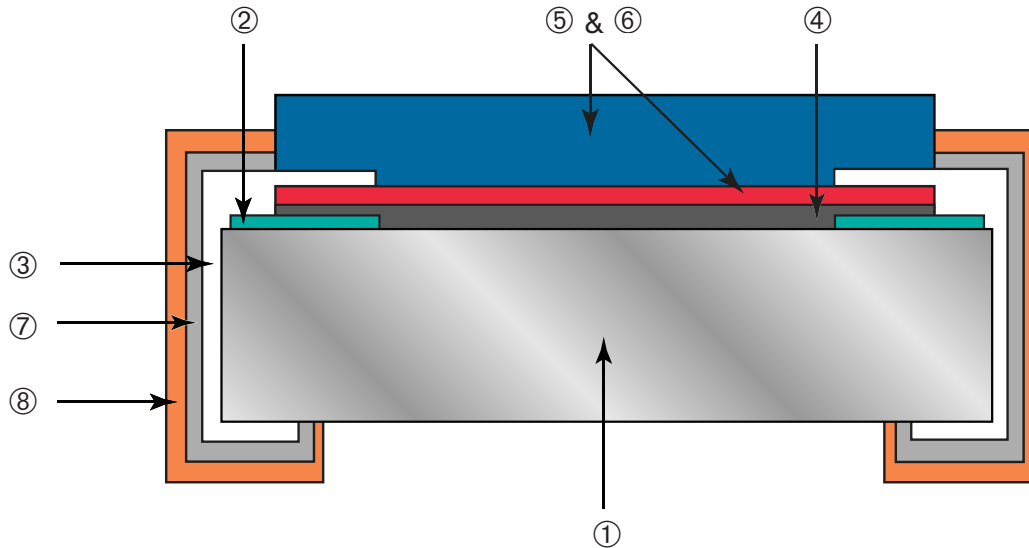
0603 Rectangular Thin Film Chip Resistor Material Composition



No.	Items	Materials
①	Substrate	Alumina
②	Base Terminal	Gold (Au) film
③	Inner Terminal	Thick film of Silver (Ag)
④	Resistive Element	Nickel Chromium (Ni-Cr)
⑤ & ⑥	Protective Coating	Resin
⑦	1st Plating	Nickel (Ni) plating
⑧	2nd Plating	100% matte Tin (Sn)

Part Name	Material	% of total Wt.	Substance	% of total Wt.	CAS No.
TFCR0603 2.0 mg	Substrate	90	Aluminium oxide	97	1344-28-1
			Silicon dioxide	3	7631-85-9
	Base & Inner Terminal	2.5	Gold	8	7440-57-5
			Silver	72	7440-22-4
			Resin (epoxy/phenol)	20	-
	Resistive Element	1	Nickel	50	7440-02-0
			Chromium	50	7440-47-3
	Protective Coating	2	Phenol resin	30	9003-35-4
			Bisphenol A epoxy resin	30	25068-38-6
			Inorganic filler	35	14807-96-6
			Organic pigment	5	147-14-8
	1st Plating	2.3	Nickel	100	7440-02-0
	2nd Plating	2.2	100% matte Tin	100	7440-31-5

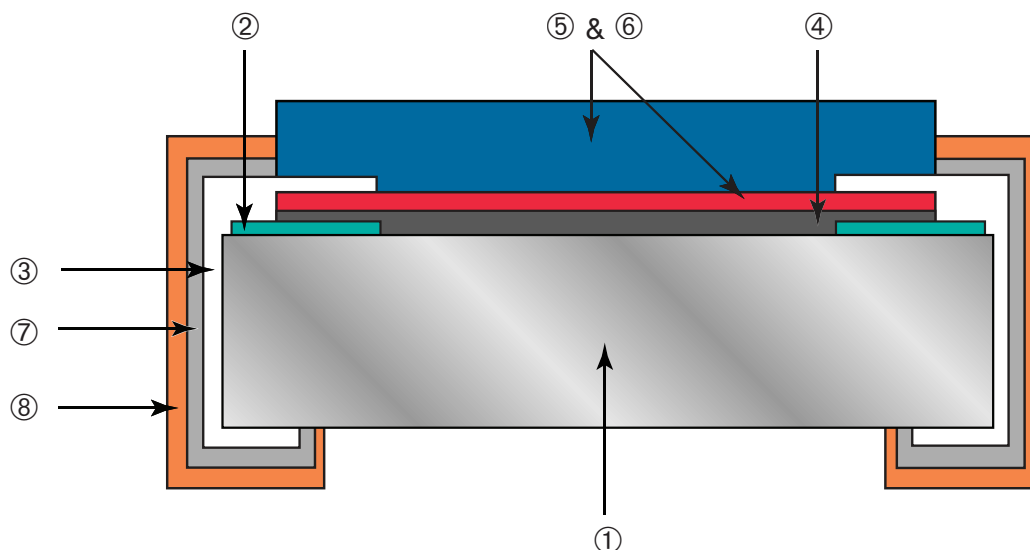
0805 Rectangular Thin Film Chip Resistor Material Composition



No.	Items	Materials
①	Substrate	Alumina
②	Base Terminal	Gold (Au) film
③	Inner Terminal	Thick film of Silver (Ag)
④	Resistive Element	Nickel Chromium (Ni-Cr)
⑤ & ⑥	Protective Coating	Resin
⑦	1st Plating	Nickel (Ni) plating
⑧	2nd Plating	100% matte Tin (Sn)

Part Name	Material	% of total Wt.	Substance	% of total Wt.	CAS No.	
TFCR0805 5.0 mg	Substrate	90	Aluminium oxide	97	1344-28-1	
			Silicon dioxide	3	7631-85-9	
	Base & Inner Terminal	2.5	Gold	8	7440-57-5	
			Silver	72	7440-22-4	
			Resin (epoxy/phenol)	20	-	
	Resistive Element	1	Nickel	50	7440-02-0	
			Chromium	50	7440-47-3	
	Protective Coating	2	Phenol resin	30	9003-35-4	
			Bisphenol A epoxy resin	30	25068-38-6	
			Inorganic filler	35	14807-96-6	
			Organic pigment	5	147-14-8	
	1st Plating		2.3	Nickel	100	7440-02-0
	2nd Plating		2.2	100% matte Tin	100	7440-31-5

1206 Rectangular Thin Film Chip Resistor Material Composition



No.	Items	Materials
①	Substrate	Alumina
②	Base Terminal	Gold (Au) film
③	Inner Terminal	Thick film of Silver (Ag)
④	Resistive Element	Nickel Chromium (Ni-Cr)
⑤ & ⑥	Protective Coating	Resin
⑦	1st Plating	Nickel (Ni) plating
⑧	2nd Plating	100% matte Tin (Sn)

Part Name	Material	% of total Wt.	Substance	% of total Wt.	CAS No.
TFCR1206 9.0 mg	Substrate	90	Aluminium oxide	97	1344-28-1
			Silicon dioxide	3	7631-85-9
	Base & Inner Terminal	2.5	Gold	8	7440-57-5
			Silver	72	7440-22-4
			Resin (epoxy/phenol)	20	-
	Resistive Element	1	Nickel	50	7440-02-0
			Chromium	50	7440-47-3
	Protective Coating	2	Phenol resin	30	9003-35-4
			Bisphenol A epoxy resin	30	25068-38-6
			Inorganic filler	35	14807-96-6
			Organic pigment	5	147-14-8
	1st Plating	2.3	Nickel	100	7440-02-0
	2nd Plating	2.2	100% matte Tin	100	7440-31-5