

MATERIAL DECLARATION SHEET

BOURNS®

Material Number	SRN4012BTA Series(R47~220)			
Product Line	Power Inductor			
Compliance Date	2025/08/13			
RoHS Compliant	Yes	MSL	Level 1	

No.	Construction Element(subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material\ Substances	CASRN if applicable	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Ferrite body	Ferrite Ni-Zn Series	0.0513988	Iron oxide	1309-37-1	62.000	41.931	67.63
				Nickel oxide	1313-99-1	11.000	7.439	
				Zinc oxide	1314-13-2	20.000	13.526	
				Copper oxide	1317-38-0	7.000	4.734	
2	Copper/ Coating	Copper Wire	0.0155952	Copper	7440-50-8	100.000	20.520	20.93
		Copper Colored Coating On The Magnet Wire	0.0003116	Polyurethane Resin	26680-22-8	100.000	0.410	
3	Terminal-Ag	Silver paste	0.00171	Silver	7440-22-4	73.700	1.658	2.25
				Silicon dioxide	60676-86-0	15.800	0.356	
				Resins	9004-57-3	10.500	0.236	
4	Terminal-Ni	S Nickel Pellets	0.00019	Nickel	7440-02-0	100.000	0.250	0.25
5	Terminal-Sn	Lead Free Solder	0.00019	Tin	7440-31-5	100.000	0.250	0.25
6	Solder	Lead-Free Solder Bar	0.0003344	Tin	7440-31-5	99.300	0.437	0.44
				Copper	7440-50-8	0.700	0.003	
7	Adhesive	MAGNETIC RESIN	0.0062396	Iron	7439-89-6	59.400	4.877	8.21
				Silicon	7440-21-3	2.100	0.172	
				Chromium	7440-47-3	1.000	0.082	
				Polyester Resin	113669-95-7	30.000	2.463	
				Carbon black	1333-86-4	7.500	0.616	
8	Marking	Hitachi IJ Printer INK	0.0000304	ChromeIII-Complex Dye	117527-94-3	100.000	0.040	0.04
Total weight			0.076					

This Document was updated on: 2025/08/13

Important remarks: It is the responsibility of the user to verify they are accessing the latest version.