



List of Component

No. PN001327 Rev.A

Date 2020/09/09

Item	Thermal print head
Part No.	KA2002-FB20A
Product mass	1400 mg

Company Name	ROHM Co., Ltd.
Address	21,Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585, Japan

No.	Part Name	Substance Name	CAS No.	Mass (mg)	Concentration (wt%)	Remark
1	IC	Die	Silicon	7440-21-3	10.413340	100.00000
2		Bump	Gold	7440-57-5	0.273000	100.00000
3		Underfill	Cyclotetrasiloxane,octamethyl-,reaction products with silica	68583-49-3	1.280020	64.00000
4			Epoxy resin	-	0.410060	20.50000
5			Amine type hardner	-	0.300020	15.00000
6			dye	-	0.009940	0.50000
7		IC protective resin	Silica	7631-86-9	86.402820	80.00000
8			Epoxy resin	-	8.640240	8.00000
9			Acid anhydride	-	10.800300	10.00000
10			CarbonBlack	1333-86-4	0.323960	0.30000
11			Antimony pentaoxide	1314-60-9	0.756000	0.70000
12			Bismuth and its compounds	-	1.079960	1.00000
13	Thermistor	Base material	Manganese tetraoxide	1317-35-7	0.200480	38.13000
14		Cobalt tetraoxide	1308-06-1	0.268800	51.14000	
15		Copper oxide	1317-38-0	0.042140	8.01000	
16		Aluminium oxide	1344-28-1	0.014280	2.72000	
17	Electrode	Silver	7440-22-4	0.051520	62.73000	
18		Palladium	7440/05/03	0.022960	27.89000	
19		Bismuth oxide	1304-76-3	0.007700	9.38000	
20	Protective glass	Silica	7631-86-9	0.022120	49.22000	
21		Aluminium oxide	1344-28-1	0.002100	4.68000	
22		Boron trioxide	1303-86-2	0.002100	4.68000	
23		Barium oxide	1304-28-5	0.010080	22.49000	
24		Others	-	0.008540	18.93000	
25	Thermistor bonding paste	Silver	7440-22-4	0.149800	75.00000	
26		Bisphenol epoxy resin F	-	0.020020	10.00000	
27		1,4-Butanediol diglycidyl ether	-	0.009940	5.00000	
28		Modified diamine	-	0.009940	5.00000	
29		Epoxy resin	-	0.009940	5.00000	
30	Solder	Tin	7440-31-5	28.984060	96.61000	
31		Silver	7440-22-4	0.882000	2.94000	
32	(0)	(0)	Copper	7440-50-8	0.134960	0.45000

33	Ceramic substrate	Glazed substrate	Aluminium oxide	1344-28-1	1,150.190160	96.00000	
34			Silica	7631-86-9	23.962260	2.00000	
35			Magnesium oxide	1309-48-4	22.764140	1.90000	
36			Glass	-	1.198120	0.10000	
37		Paste	Gold	7440-57-5	20.897660	98.20000	
38			Lead oxide	1317-36-8	0.121240	0.57000	RoHS exemption :7(c)-I
39			Glass and metal oxide	-	0.261800	1.23000	
40		Paste	Gold	7440-57-5	0.407260	96.97000	
41			Glass and metal oxide	-	0.010220	2.43000	
42			Lead oxide	1317-36-8	0.002520	0.60000	RoHS exemption :7(c)-I
43		Paste	Silver	7440-22-4	9.126320	97.50000	
44			Lead oxide	1317-36-8	0.117040	1.25000	RoHS exemption :7(c)-I
45			Inorganic component	-	0.117040	1.25000	
46		Paste	Silver	7440-22-4	5.150740	97.18000	
47			Glass and metal oxide	-	0.149520	2.82000	
48		Paste	Silver	7440-22-4	0.407260	96.96000	
49	Platinum		7440/06/04	0.003220	0.76000		
50	Glass and metal oxide		-	0.009520	2.28000		
51	Paste	Ruthenium dioxide	12036-10-1	0.040180	20.10000		
52		Lead oxide	1317-36-8	0.023520	11.75000	RoHS exemption :7(c)-I	
53		Glass and metal oxide	-	0.136360	68.15000		
54	Paste	Lead oxide	1317-36-8	6.165740	46.15000	RoHS exemption :7(c)-I	
55		Glass	-	4.110960	30.77000		
56		Aluminium oxide	1344-28-1	3.084060	23.08000		

Remarks

- All information in this document is furnished for exploratory or indicative purposes only.
- This information provides estimates of the average weights and content of component materials. And does not include impurities or metals diffused in the silicon.
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