



List of Component

No. PN001321 Rev.A

Date 2020/09/09

Item	Thermal print head	Company Name	ROHM Co., Ltd.
Part No.	KD2002-DEFW00A	Address	21,Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585, Japan
Product mass	11800 mg		

No.	Part Name	Substance Name	CAS No.	Mass (mg)	Concentration (wt%)	Remark
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	Die-Bonging Paste	Silica	60676-86-0	1.0797	60	
1		Epoxy resin	9003-36-5	0.540440	30.00000	
2		Phenol -formaldehyde	9003-35-4	0.179360	10.00000	
3	Bonding wire	Gold	7440-57-5	6.789720	100.00000	
4	IC protective resin	Silica	-	192.000160	80.00000	
5		Epoxy resin	-	24.000020	10.00000	
6		Acid anhydride	-	19.199780	8.00000	
7		CarbonBlack	1333-86-4	0.719800	0.30000	
8		Antimony pentaoxide	1314-60-9	1.680320	0.70000	
9		Bismuth compounds	-	2.400120	1.00000	
10	IC protective resin	Silica	-	189.600040	79.00000	
11		Epoxy resin	-	26.400140	11.00000	
12		Acid anhydride	-	21.599900	9.00000	
13		CarbonBlack	1333-86-4	0.480260	0.20000	
14		Antimony pentaoxide	1314-60-9	0.719800	0.30000	
15	Bismuth compounds	-	1.200060	0.50000		
16	Thermistor	Manganese tetraoxide	1317-35-7	0.225380	30.00000	
17		Nickel oxide	1313-99-1	0.225380	30.00000	
18		Aluminium oxide	1344-28-1	0.225380	30.00000	
19		Gold	7440-57-5	0.034220	4.50000	
20		Lead oxide	1317-36-8	0.003540	0.50000	RoHS exemption :7(c)-I
21		Others	-	0.037760	5.00000	
22	Thermistor bonding paste	Silver	7440-22-4	0.151040	75.00000	
23		Bisphenol epoxy resin F	-	0.020060	10.00000	
24		1,4-Butanediol diglycidyl ether	-	0.010620	5.00000	
25		Modified diamine	-	0.010620	5.00000	
26		Epoxy resin	-	0.010620	5.00000	
27	Heatsink	Silicon	7440-21-3	28.559540	0.42000	
28		Iron	7439-89-6	10.879600	0.16000	
29		Copper	7440-50-8	0.679680	0.01000	
30		Manganese	7439-96-5	0.679680	0.01000	
31		Magnesium	7439-95-4	34.000520	0.50000	
32	(0)	(0)	Chromium	7440-47-3	0.679680	0.01000

33		Zinc	7440-66-6	0.679680	0.01000		
34		Titanium	7440-32-6	0.679680	0.01000		
35		Aluminum	7429-90-5	6,723.160920	98.87000		
36		Adhesive tape	Acrylic adhesive	-	28.999680	100.00000	
37	Connector	Terminal	Copper	7440-50-8	456.546720	94.80000	
38			Tin	7440-31-5	24.079080	5.00000	
39			Phosphorus	7723-14-0	0.962880	0.20000	
40		Terminal Surface treatment	Tin	7440-31-5	25.200080	100.00000	
41		Resin part	1,4-Benzenedicarboxylic acid, polymer with 2-methyl-1,8-octanediamine and 1,9-nonanediamine	169284-22-4	214.199500	42.00000	
42			Glass fiber	65997-17-3	168.299860	33.00000	
43			Brominated flame retardants (except PBB and PBDE)	88497-56-7	112.200300	22.00000	
44			CarbonBlack	1333-86-4	15.299880	3.00000	
45		UV resin	Acrylate Oligomer	-	104.532660	80.41000	
46			Glycidyl methacrylate	106-91-2	4.420280	3.40000	
47		2-Hydroxyethyl acrylate	818-61-1	5.589660	4.30000		
48		N-Vinyl-2-pyrrolidone	88-12-0	8.839380	6.80000		
49		Amorphous silica	-	6.499440	5.00000		
50		Dibutyltin compounds	-	0.116820	0.09000		
51	Ceramic substrate	Glazed substrate	Aluminium oxide	1344-28-1	3,032.066640	96.00000	
52			Silica	7631-86-9	63.167760	2.00000	
53			Magnesium oxide	1309-48-4	60.010080	1.90000	
54			Glass	-	3.158860	0.10000	
55		Paste	Gold	7440-57-5	70.704420	98.20000	
56			Lead oxide	1317-36-8	0.410640	0.57000	RoHS exemption :7(c)-I
57			Glass and metal oxide	-	0.886180	1.23000	
58		Paste	Gold	7440-57-5	1.211860	96.97000	
59			Glass and metal oxide	-	0.030680	2.43000	
60			Lead oxide	1317-36-8	0.007080	0.60000	RoHS exemption :7(c)-I
61		Paste	Silver	7440-22-4	56.606960	97.18000	
62			Glass and metal oxide	-	1.642560	2.82000	
63		Paste	Ruthenium dioxide	12036-10-1	0.070800	20.10000	
64			Lead oxide	1317-36-8	0.041300	11.75000	RoHS exemption :7(c)-I
65			Glass and metal oxide	-	0.238360	68.15000	
66		Paste	Lead oxide	1317-36-8	8.749700	28.00000	RoHS exemption :7(c)-I
67			Glass	-	18.122440	57.99000	
68			Aluminium oxide	1344-28-1	4.377800	14.01000	
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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.
- The contained volume/mass is a calculated value. For this reason, there are cases when the total volume/mass may differ from the product volume/mass.
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