

CONSTITUTION MATERIALS LIST

The RoHS directive, REACH regulation, and other laws and regulations related to the management of environmentally hazardous substances come into effect. When developing products, the global environmental load must be considered. ROHM pursues green procurement and endeavors to increase the detection accuracy of chemicals contained in parts and procured materials while at the same time placing great importance on the internal chemical management system that was built to ensure that no prohibited substances are procured, used or shipped in order to provide a steady supply of worry-free products.

Type	Package Code	ROHM Package	Mass (g)	Part No.
SiC PM	-	C type	269.8638	BSM120D12P2C005

No	Part Name	Part	Weight (g)	Substance Name	CAS No	Weight (g)	Portion vs. Products	Portion vs. Part Name
1	Cu base	Base material	159.1000	Copper (Cu)	7440-50-8	159.1000	58.96%	100.00%
		Surface treatment	0.4800	Nickel (Ni)	7440-02-0	0.4800	0.18%	100.00%
2	Direct Bonded Copper Substrate	Base material	7.3700	Copper (Cu)	7440-50-8	4.8370	1.79%	65.63%
				Aluminum nitride (AlN)	24304-00-5	2.1733	0.81%	29.49%
				Silver (Ag)	7440-22-4	0.3249	0.12%	4.41%
				Yttrium oxide	1314-36-9	0.0286	0.01%	0.39%
				Titanium (Ti)	7440-32-6	0.0063	0.00%	0.09%
		Surface treatment	0.0600	Nickel (Ni)	7440-02-0	0.0600	0.02%	100.00%
3	Adhesive		1.0000	Polyalkyl alkenyl siloxane	-	0.5000	0.19%	50.00%
				Silica (Quartz)	14808-60-7	0.4000	0.15%	40.00%
				Polyalkyl hydrogen siloxane	-	0.0500	0.02%	5.00%
				Silica (Amorphous)	-	0.0500	0.02%	5.00%
4	Case	Body	42.2300	Filler	-	29.5600	10.95%	70.00%
				Poly phenylene sulfide	26125-40-6	12.4600	4.62%	29.51%
				Carbon black	-	0.2100	0.08%	0.50%
		Color	1.0800	Brass	12597-71-6	1.0800	0.40%	100.00%
		Nut (Base material)	8.6200	Iron (Fe)	7439-89-6	8.6200	3.19%	100.00%
		Nut (Surface treatment)	0.0550	Chromic compound	-	0.0550	0.02%	100.00%
		Terminal (Base material)	16.8600	Copper (Cu)	7440-50-8	16.8600	6.25%	100.00%
		Terminal (Surface treatment)	0.1420	Nickel (Ni)	7440-02-0	0.1420	0.05%	100.00%
5	Lid		7.6200	Poly phenylene sulfide	26125-40-6	2.7700	1.03%	36.35%
				Alumina borosilicate glass	65997-17-3	2.6600	0.99%	34.91%
				Calcium carbonate	471-34-1	2.1300	0.79%	27.95%
				Carbon black	1333-86-4	0.0400	0.01%	0.52%
				Moisture magnesium silicate	14807-96-6	0.0200	0.01%	0.26%
6	Aluminum wire		1.4100	Aluminum (Al)	7429-90-5	1.4100	0.52%	100.00%
7	Silicone gel		20.0000	Silicone	-	20.0000	7.41%	100.00%
8	Solder		3.6500	Tin (Sn)	7440-31-5	3.3500	1.24%	91.78%
				Silver (Ag)	7440-22-4	0.1700	0.06%	4.66%
				Antimony (Sb)	7440-36-0	0.1000	0.04%	2.74%
				Copper (Cu)	7440-50-8	0.0300	0.01%	0.82%
9	MOS chip		0.1112	Silicon Carbide (SiC)	409-21-2	0.1084	0.04%	97.47%
				Aluminum (Al)	7429-90-5	0.0013	0.0005%	1.20%
				Nickel (Ni)	7440-02-0	0.0007	0.0003%	0.66%
				Silver (Ag)	7440-22-4	0.0004	0.0002%	0.39%
				Gold (Au)	7440-57-5	0.0002	0.0001%	0.17%
				Titanium (Ti)	7440-32-6	0.0001	0.0001%	0.12%
10	SBC chip		0.0756	Silicon Carbide (SiC)	409-21-2	0.0736	0.03%	97.39%
				Aluminum (Al)	7429-90-5	0.0009	0.0003%	1.23%
				Nickel (Ni)	7440-02-0	0.0005	0.0002%	0.69%
				Silver (Ag)	7440-22-4	0.0003	0.0001%	0.41%
				Gold (Au)	7440-57-5	0.0001	0.00005%	0.17%
			269.8638			269.8638	100.00%	

備考

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免責事項

Constitution Materials List is composed using the information provided by the raw material suppliers.

However, due to the confidentiality of some suppliers, some information may not be provided fully.

Therefore we cannot guarantee that all chemical substances information are listed in it.

•The content shown is the representative value content.

•The data does not include overcoat, impurities and dopant diffused in the semiconductor chip.

Notes

- 1) The information contained herein is subject to change without notice.
- 2) Before you use our Products, please contact our sales representative and verify the latest specifications :
- 3) Although ROHM is continuously working to improve product reliability and quality, semiconductors can break down and malfunction due to various factors.
Therefore, in order to prevent personal injury or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. ROHM shall have no responsibility for any damages arising out of the use of our Products beyond the rating specified by ROHM.
- 4) Examples of application circuits, circuit constants and any other information contained herein are provided only to illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.
- 5) The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM or any other parties. ROHM shall have no responsibility whatsoever for any dispute arising out of the use of such technical information.
- 6) The Products are intended for use in general electronic equipment (i.e. AV/OA devices, communication, consumer systems, gaming/entertainment sets) as well as the applications indicated in this document.
- 7) The Products specified in this document are not designed to be radiation tolerant.
- 8) For use of our Products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a ROHM representative : transportation equipment (i.e. cars, ships, trains), primary communication equipment, traffic lights, fire/crime prevention, safety equipment, medical systems, servers, solar cells, and power transmission systems.
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