ROHM

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.

	Туре	Package Code		ROHM Package		Mass (g)	Part No.	
SiC PM		-		C type		269.8638	BSM180D12P3C007	
Nº	Part Name	Part	Weight (g)	Substance Name	CAS №	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	Base material	7.3700	Copper (Cu)	7440-50-8	4.8370	1.79%	65.63%
	Copper Substrate			Aluminum nitride(AIN)	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	0.002%	0.09%
		Surface treatment	0.0600	Nickel (Ni)	7440-02-0	0.0600	0.02%	100.00%
3	Adhesive		1.0000	Polyalky 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%
				Titanium (Ti)	7440-32-6	0.0001	0.00003%	0.12%
			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 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 specifica- tions :							
3)	Although ROHM is continuously working to improve product reliability and quality, semicon- ductors 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 Poducts 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.							
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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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11)	ROHM has used reasonable care to ensur the accuracy of the information contained in this document. However, ROHM does not warrants that such information is error-free, and ROHM shall have no responsibility for any damages arising from any inaccuracy or misprint of such information.							
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