

Product	LED
Series	MSL0104RGBU
Mass (mg)	12.937030

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.

○ This item is in compliance with RoHS.

○ Pb free

製品本体 Product		部位重量 Part Weight (mg)	物質名 Substance Name	CAS No	含有量 Content Weight (mg)	含有率(%) (/製品重量) Content per Product Weight	含有率(%) (/構成材料) Content per Part Weight		
No	構成材料 Material Name								
1	インサートフレーム Insert Flame	樹脂 Resin	ポリフタルアミド Poly phthalate Amide	25776-72-1	0.9590000	7.4128	7.9917		
			ワラストナイト Wollastonite	13983-17-0	0.2790000	2.1566	2.3250		
			酸化チタン Titanium oxide(TiO2)	13463-67-7	0.2980000	2.3035	2.4833		
	母材 Parent metal	銅 Copper(Cu)	7440-50-8	9.9270000	76.7332	82.7250			
		鉄 Iron(Fe)	7439-89-6	0.1690000	1.3063	1.4083			
		リン Phosphorus(P)	7723-14-0	0.0090000	0.0696	0.0750			
		銀 Silver(Ag)	7440-22-4	0.3590000	2.7750	2.9917			
2	ダイボンディング材 Die-Bonding Paste	0.330000	銀 Silver(Ag)	7440-22-4	0.267300	2.0662	81.0000		
			ビスフェノールA型エポキシ樹脂 Bisphenol A Epoxy Resin	9003-36-5	0.039600	0.3061	12.0000		
			その他 Other	-	0.023100	0.1786	7.0000		
3	ダイボンディング材 Die-Bonding Paste	0.050000	エポキシ樹脂 Epoxy Resin	-	0.025000	0.1932	50.0000		
			シリコン樹脂 Silicone Resin	-	0.025000	0.1932	50.0000		
4	ボンディングワイヤー Bonding wire	0.100000	金 Gold(Au)	7440-57-5	0.100000	0.7730	100.0000		
5	封止樹脂 Resin	0.280000	ジメチルポリシロキサン Dimethylpolysiloxane	63148-62-9	0.280000	2.1643	100.0000		
6	拡散材 Diffuser	0.020000	シカカラス Dioxosilane	87347-84-0	0.002000	0.0155	100.0000		
			LED素子 LED Die	0.100000	サファイア Sapphire(Al2O3)	1344-28-1	0.097273	0.7519	97.2727
			金 Gold(Au)		7440-57-5	0.000273	0.0021	0.2727	
			その他 Other		-	0.002455	0.0190	2.4545	
8	LED素子 LED Die	0.074700	ガリウム Gallium(Ga)	7440-55-3	0.003500	0.0271	4.6854		
			砒素 Arsenic(As)	7440-38-2	0.002300	0.0178	3.0790		
			インジウム Indium(In)	7440-74-6	0.000400	0.0031	0.5355		
			アルミニウム Aluminum(Al)	7429-90-5	0.000200	0.0015	0.2677		
			リン Phosphorus(P)	7723-14-0	0.000400	0.0031	0.5355		
			金 Gold(Au)	7440-57-5	0.000500	0.0039	0.6693		
			シリコン Silicone(Si)	7440-21-3	0.064600	0.4993	86.4793		
			銀 Silver(Ag)	7440-22-4	0.002600	0.0201	3.4806		
			その他 Other	-	0.000200	0.0015	0.2677		
			9	Di素子 Di Die	0.000330	シリコン Silicone(Si)	7440-21-3	0.000020	0.0002
金 Gold(Au)	7440-57-5	0.000040				0.0003	12.1212		
その他 others	-	0.000270				0.0021	81.8182		
Total				-	12.937030	100.0000			

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