

## **CONSTITUTION MATERIALS LIST**

Product	LED
Series	SML-811x/812x
Mass (mg)	4.998950

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.

OThis item is in compliance with RoHS.

OPb free

	● PD IT										
No.	# + + + + 4 1		部位重量 Part Weight (mg)	物質名 Substance Name		CAS №	含有量 Content Weight (mg)	含有率(%) 〈/.製品重量〉 Content per Product Weight	含有率(%) 構成材料〉<br Content per Part Weight		
1	基板	基材	2.588950	エポキシ樹脂	Epoxy Resin	-	0.590000	11.8025	22.7892		
	Substrate	Substrate Material		ガラスクロス	Glass Cloth	-	0.530000	10.6022	20.4716		
		端子処理		銅	Copper(Cu)	7440-50-8	1.120000	22.4047	43.2608		
		Electrode		クロム及び3価クロム化合物	Chromium Chemical Compound	_	0.000020	0.0004	0.0008		
				チタン化合物	Titanium Chemical Compound	_	0.070000	1.4003	2.7038		
				ニッケル	Nickel(Ni)	7440-02-0	0.250000	5.0011	9.6564		
				亜鉛	Zinc(Zn)	7440-66-6	0.000100	0.0020	0.0039		
				砒素	Arsenic(As)	7440-38-2	0.000030	0.0006	0.0012		
				金	Gold(Au)	7440-57-5	0.011000	0.2200	0.4249		
		レジスト		エポキシ樹脂	Epoxy Resin	-	0.008900	0.1780	0.3438		
		Resist Ink		着色顔料	Dye	_	0.008900	0.1780	0.3438		
2	ダイホンティングが材		0.050000	銀	Silver(Ag)	7440-22-4	0.040500	0.8102	81.0000		
	Die-Bonding Paste			ビスフェノールA型エポキシ樹脂	Bisphenol A Epoxy Resin	9003-36-5	0.006000	0.1200	12.0000		
				その他	Other	-	0.003500	0.0700	7.0000		
3	ボンディングワイヤー Bonding wire		0.010000	金	Gold(Au)	7440-57-5	0.010000	0.2000	100.0000		
4	封止樹脂		2.310000	ビスフェノールAジクリシジルエーテル	Bisphenol A diglycidyl ether(BADGE)	25068-38-6	2.106720	42.1433	91.2000		
	Resin			その他	Other	-	0.203280	4.0665	8.8000		
5	LED素子		0.040000	ガリウム	Gallium(Ga)	7440-55-3	0.023200	0.4641	58.0000		
	LED Die			砒素	Arsenic(As)	7440-38-2	0.015200	0.3041	38.0000		
				インジウム	Indium(In)	7440-74-6	0.000300	0.0060	0.7500		
				アルミニウム	Aluminum(AI)	7429-90-5	0.000100	0.0020	0.2500		
				リン	Phosphorus(P)	7723-14-0	0.000300	0.0060	0.7500		
				<b>金</b>	Gold(Au)	7440-57-5	0.000500	0.0100	1.2500		
				その他	Other	_	0.000400	0.0080	1.0000		
				•	Total		4.998950	100.0000			

## Disclaimer

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- •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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