

## **Constitution Materials List**

Product	Laser diode
Package	RLD63NPC8
Weight(mg)	305.7049

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

No.	Part Name	Substance Name	CAS No.	Weight [mg]	Content
1	LD Die	GaAs	7440-38-2	0.0459	97.8913%
		Titanium (Ti)	7440-32-6	0.0001	0.3039%
		Aluminium(Al)	7429-90-5	0.0004	0.7538%
		Gold(Au)	7440-57-5	0.0005	1.0510%
2	PD Die	Silicon(Si)	7440-21-3	0.2572	99.3779%
		Aluminium(Al)	7429-90-5	0.0009	0.3284%
		Gold(Au)	7440-57-5	0.0008	0.2931%
3	Die attach	Silver(Ag)	7440-22-4	0.0326	72.5000%
		Bisphenol A Diglycidyl Ether Resin(C18H21ClO3)	2506-83-86	0.0018	4.0000%
		N,N-Diglycidyl-4-Glycidyloxy Aniline(C15H19N04)	5026-74-4	0.0027	6.0000%
		Epoxy Resin	_	0.0046	10.2500%
		Dicyandiamide (C2H4N4)	461-58-5	0.0003	0.7500%
		Diethyleneglycol monoethyl ether acetate	112-15-2	0.0029	6.5000%
4	Submount Die	Aluminum nitride(AIN)	24304-00-5	0.5300	95.4577%
		Titanium (Ti)	7440-32-6	0.0006	0.1117%
		Platinum(Pt)	7440-06-4	0.0072	5.4620%
		Gold(Au)	7440-57-5	0.0161	2.8998%
		Tin(Sn)	7440-31-5	0.0013	0.2341%
5	Die attach	Epoxy Resin	28061-14-4	0.1066	97.8520%
		Dicyandiamide(C2H4N4)	461-58-5	0.0008	0.7160%
		Silica	92797-60-9	0.0008	0.7160%
		Adipic acid	124-04-9	0.0008	0.7160%

No.	Part Name		Substance Name	CAS No.	Weight [mg]	Content
6	Stem	Base material	Iron(Fe)	7439-89-6	226.1900	99.3805%
			Carbon(C)	7440-44-0	0.2700	0.1186%
			Mangan (Mn)	7439-96-5	1.1400	0.5009%
		Lead pin	Iron(Fe)	7439-89-6	14.7500	51.0204%
			Nickel(Ni)	7440-02-0	9.2500	31.9958%
			Cobalt(Co)	7440-48-4	4.9100	16.9837%
		Glass	Silicon oxide(SiO2)	7631-86-9	1.9500	65.0000%
			Aluminium oxide(Al2O3)	1344-28-1	0.2100	7.0000%
			Sodium oxide(Na2O)	1313-59-3	0.2100	7.0000%
			Potassium oxide(K2O)	12136-45-7	0.2100	7.0000%
			Lithium oxide(Li2O)	12057-24-8	0.0300	1.0000%
			Barium oxide(BaO)	1304-28-5	0.2700	9.0000%
			Zinc oxide(ZnO)	1314-13-2	0.1200	4.0000%
		Plating	Nickel(Ni)	7440-02-0	6.1600	97.0079%
			Gold(Au)	7440-57-5	0.1900	2.9921%
7	Сар	Base material	Iron(Fe)	7439-89-6	37.6460	99.5926%
			Manganese(Mn)	7440-96-5	0.0950	0.2513%
			Sulfur(S)	7704-34-9	0.0340	0.0899%
			Carbon(C)	7440-44-0	0.0190	0.0503%
			Phosphorus(P)	7723-14-0	0.0060	0.0159%
		Plating	Nickel(Ni)	7440-02-0	0.9000	100.0000%
8	Bonding wire		Gold(Au)	7440-57-5	0.1300	99.9898%
			Beryllium(Be)	7440-41-7	0.0000	0.0009%
			Other		0.0000	0.0092%

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