



Semiconductor Device Type: G4X-QFN-20-4x4x0.9mm-MatteTin

Material	Substance	CAS Number	Mass of Substance in Material (mg)	Mass of Material (mg)	Percentage of Substance in Material	Percentage of Material in Product	Percentage of Substance in Product	Amount of Substance in Product (ppm)
Die				1.62	100.00%	3.76%		
	Silicon	7440-21-3	1.62		100.00%		3.76%	37587
Plating and Anode Ball				0.65	100.00%	1.51%		
	Tin	7440-31-5	0.65		99.90%		1.51%	15066
	Miscellaneous	Trade Secret	0.00		0.10%		0.00%	15
Bond Wire				0.19	100.00%	0.44%		
	Gold	7440-57-5	0.19		100.00%		0.44%	4408
Mold Compound				20.37	100.00%	47.26%		
	Metal Hydroxide	Trade Secret	0.51		2.50%		1.18%	11816
	Carbon Black	1333-86-4	0.10		0.50%		0.24%	2363
	Epoxy Resin	Trade Secret	1.43		7.00%		3.31%	33084
	Phenolic Resin	Trade Secret	1.02		5.00%		2.36%	23631
	Silica (Fused)	60676-86-0	17.31		85.00%		40.17%	401729
Die Attach				0.97	100.00%	2.25%		
	Silver	7440-22-4	0.66		68.00%		1.53%	15304
	Carbocyclic Acrylate	Trade Secret	0.19		20.00%		0.45%	4501
	Bismaleimide Resin	Trade Secret	0.05		5.00%		0.11%	1125
	Acrylate	Trade Secret	0.05		5.00%		0.11%	1125
	Epoxy cyclohexylethyltrimethoxysilane	3388-04-3	0.01		1.00%		0.02%	225
	Palladium Compound	Trade Secret	0.01		1.00%		0.02%	225
Lead Frame				18.93	100.00%	43.92%		
	Lead	7439-92-1	0.00		0.01%		0.00%	44
	Copper	7440-50-8	18.37		97.02%		42.61%	426106
	Phosphorus	7723-14-0	0.03		0.15%		0.07%	664
	Iron	7439-89-6	0.50		2.62%		1.15%	11512
	Zinc	7440-66-6	0.04		0.20%		0.09%	886
Lead Frame Plating				0.37	100.00%	0.86%		
	Silver	7440-22-4	0.37		100.00%		0.86%	8585
Totals			43.10	43.10		100.00%	100.00%	1000000

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