Part Number: **1N4448HWS-(p)-F** p = package designator
Weight (mg): 5.2611 See Data Sheet

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Materal(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	1.23	0.0647	1000000	12298
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	24.35	1.2809	576500	140358
		Ni	7440-02-0	41.00%			410000	99821
		Mn	7439-96-5	0.60%			6000	1461
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	243
		Co	7440-48-4	0.50%			5000	1217
		Si	7440-21-3	0.15%			1500	365
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	0.96	0.0505	1000000	9599
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	0.14	0.0076	1000000	1445
Encapsulation	KTMC1050G	Silicone dioxide	60676-86-0	69.00%	70.39	3.7033	690000	485693
		Ortho Creson Novolac Epoxy Resin	29690-82-2	12.25%			122500	86228
		Basic Duromer:Phenolic resin (Compound of polymeric network)	9003-35-4	5.50%			55000	38715
		Misc.	system	12.75%			127500	89748
		Carbon black	1333-86-4	0.50%			5000	3520
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	2.93	0.1541	1000000	29290
				Total	100.00	5.2611		1000000

Tolerance ±10%

This data is based on information provided by our suppliers. We believe it to be correct but do not routinely validate it by measurement. It is for guidance only and Diodes Inc. does not guarantee its absolute accuracy or completeness

* The Silicon Chip is doped at atomic levels with trace amounts of elements that may include Phosphorus, Boron, Arsenic, and other elements. Metalization may include Titanium, Nickel, Aluminum, Silver or Gold These substances are not reported where their concentration is less than the minimum reportable level per the guidelines specified in the Tables of EIA JIG-101, *Material Composition Declaration for Electronic Products* .

This product or product family does not contain any of the following substances except as **CURRENTLY** exempted by ELV II and RoHS and reported above:

Asbestos	Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)
Azo compounds	Ozone Depleting Substances - Class II (HCFCs)
Cadmium and cadmium compounds	Perfluorooctane Sulphonate (PFOS) or related compounds
Certain Shortchain Chlorinated Paraffins	Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including **DecaBDE**
Chlorinated organic compounds	Polychlorinated Biphenyls (PCBs)
Hexavalent chromium compounds	Polychlorinated Naphthalenes (> 3 chlorine atoms)
Lead and lead compounds	Radioactive Substances
Mercury and mercury compounds	Tributyl Tin (TBT) and Triphenyl Tin (TPT)
Organic tin compounds	Tributyl Tin Oxide (TBTO)

Part Number: **1N4448HWS-(p)-F (Date Code 0850+)** p = package designator
Weight (mg): 5.2611 See Data Sheet

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		Co	7440-48-4	0.50%			5000	1217
		Si	7440-21-3	0.15%			1500	365
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	0.96	0.0505	1000000	9599
Bond Wire	Copper Wire	Copper	7440-50-8	100.00%	0.07	0.0035	1000000	1445
Encapsulation	KTMC1050G	Silicone dioxide	60676-86-0	69.00%	70.47	3.7074	690000	485693
		Ortho Creson Novolac Epoxy Resin	29690-82-2	12.25%			122500	86228
		Basic Duromer:Phenolic resin (Compound of polymeric network)	9003-35-4	5.50%			55000	38715
		Misc.	system	12.75%			127500	89748
		Carbon black	1333-86-4	0.50%			5000	3520
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	2.93	0.1541	1000000	29290
				Total	100.00	5.2611		1000000

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Chlorinated organic compounds	Polychlorinated Biphenyls (PCBs)
Hexavalent chromium compounds	Polychlorinated Naphthalenes (> 3 chlorine atoms)
Lead and lead compounds	Radioactive Substances
Mercury and mercury compounds	Tributyl Tin (TBT) and Triphenyl Tin (TPT)
Organic tin compounds	Tributyl Tin Oxide (TBTO)

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