Diodes Inc. Material Data Sheet
Rev: June 2008

Part Number: **DDZ9xxxaS-(p)-F**

p = package designator

xxxa = 2V0A, 2V2A, 2V4A, 2V7A, 3V0A, 3V3A, 3V6A, 3V9A, 4V3B, 4V7B, 5V1B, 5V6B, 6V2B, 6V8C, 7V5C, 8V2C, 9V1C, 10C, 11C, 12C, 13B, 14, 15, 16, 18C, 20C, 22D, 24C, 27D, 30D, 33, 36, 39F, 43, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717

Weight (mg): 4.9474

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%	1.15	0.0571	1000000	11541
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	25.89	1.2809	576500	149258
		Ni	7440-02-0	41.00%			410000	106151
		Mn	7439-96-5	0.60%			6000	1553
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	259
		Co	7440-48-4	0.50%			5000	1295
		Si	7440-21-3	0.15%			1500	388
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	1.02	0.0505	1000000	10207
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	0.18	0.0089	1000000	1799
Encapsulation	KTMC-1050G	SiO2	60676-86-0	69.00%	70.88	3.5069	690000	489098
		Epoxy Resin	29690-82-2	14.00%			140000	99237
		Phenol Resin	9003-35-4	7.00%			70000	49619
		Mg(OH)2	1309-42-8	8.00%			80000	56707
		C	1333-86-4	0.20%			2000	1418
		others	----	1.80%			18000	12759
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	0.87	0.0431	1000000	8712
				Total	100.00	4.9474		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 o 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
Azo compounds
Cadmium and cadmium compounds
Certain Shortchain Chlorinated Paraffins
Chlorinated organic compounds
Hexavalent chromium compounds
Lead and lead compounds
Mercury and mercury compounds
Organic tin compounds
Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)
Ozone Depleting Substances - Class II (HCFCs)
Perfluorooctane Sulphonate (PFOS) or related compounds
Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including **DecaBDE**
Polychlorinated Biphenyls (PCBs)
Polychlorinated Naphthalenes (> 3 chlorine atoms)
Radioactive Substances
Tributyl Tin (TBT) and Triphenyl Tin (TPT)
Tributyl Tin Oxide (TBTO)

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