Diodes Inc. Material Data Sheet
Rev: August 2008

Part Number: **DDTDxxx-(p)-F**
Weight (mg): 8.52 DATE CODE 0833+

p = package designator
See Data Sheet

xxx= 113EC, 113ZC, 114EC, 114GC, 114TC, 122JC, 122LC, 122TC, 123EC, 123TC, 123YC, 133HC, 142JC, 142TC, 143EC, 143TC

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%	2.46	0.21	1000000	24610
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	28.69	2.44	576500	165376
		Ni	7440-02-0	41.00%			410000	117613
		Mn	7439-96-5	0.60%			6000	1721
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	287
		Co	7440-48-4	0.50%			5000	1434
		Si	7440-21-3	0.15%			1500	430
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	1.21	0.10	1000000	12140
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	0.30	0.03	1000000	3006
Encapsulation	KTMC-1050G	SiO2	60676-86-0	69.00%	64.34	5.48	690000	443935
		Epoxy Resin	29690-82-2	14.00%			140000	90074
		Phenol Resin	9003-35-4	7.00%			70000	45037
		Mg(OH)2	1309-42-8	8.00%			80000	51471
		C	1333-86-4	0.20%			2000	1287
		others	----	1.80%			18000	11581
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	3.00	0.26	1000000	29999
				Total	100.00	8.52		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)