Diodes Inc. Material Data Sheet
Rev: June 2008

Part Number: **BAVxxWS-(p)-F (Date Code 0832+)** p = package designator X= 16, 19, 20, 21
Weight (mg): 5.2589 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%	0.79	0.041	1000000	7872
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	24.36	1.281	576500	140417
		Ni	7440-02-0	41.00%			410000	99863
		Mn	7439-96-5	0.60%			6000	1461
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	244
		Co	7440-48-4	0.50%			5000	1218
		Si	7440-21-3	0.15%			1500	365
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	0.96	0.051	1000000	9603
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	0.14	0.008	1000000	1445
Encapsulation	KTMC-1050G	SiO2	60676-86-0	69.00%	70.82	3.724	690000	488664
		Epoxy Resin	29690-82-2	14.00%			140000	99149
		Phenol Resin	9003-35-4	7.00%			70000	49575
		Mg(OH)2	1309-42-8	8.00%			80000	56657
		C	1333-86-4	0.20%			2000	1416
		others	----	1.80%			18000	12748
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	2.93	0.154	1000000	29303
				Total	100.00	5.259		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)

3050 E. Hillcrest Dr.
Westlake Village, CA 91362
(805) 446-4800