

**Diodes Inc. Material Data Sheet** Rev: August 2008

Part Number: BAS16-p-F, BAS31-p-F, BAV70-p-F, BAV99 -p-F

Weight (mg): p=package designator

(HF Date Code 0740+) See Data Sheet

(The Date Code 07404)				Jee Data Sheet				
Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Materal(%)			ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	0.51	0.04	1000000	510
Leadframe		Fe	7439-89-6	57.65%	28.80	2.44	576500	16604
		Ni	7440-02-0	41.00%			410000	11809
	Alloy 42	Mn	7439-96-5	0.60%			6000	1728
	Alloy 42	Cr(not Cr 6+)	7440-47-3	0.10%			1000	288
		Co	7440-48-4	0.50%			5000	1440
		Si	7440-21-3	0.15%			1500	432
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	1.22	0.10	1000000	12190
Bond Wire	Copper Wire	Cu	7440-50-8	100.00%	0.07	0.01	1000000	696
Encapsulation		SiO2	60676-86-0	87.30%	66.39	5.63	873000	579554
		Epoxy Resin	29690-82-2	5.00%			50000	33193
	CEL-1702HF-9	Phenol Resin	26834-02-6	5.00%			50000	33193
		Aromatic poly-phosphate		2.50%			25000	16597
		C	1333-86-4	0.20%			2000	1328
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	3.01	0.26	1000000	30120
				Total	100.00	8.48		1000000

+10% Tolerance

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

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: Organic tin compounds

Antimony Compounds Azo compounds Cadmium and cadmium compounds Certain Shortchain Chlorinated Paraffins Chlorinated organic compounds

Halogens Hexavalent chromium compounds

Mercury and mercury compounds

REACH SVHCs: Anthracene

Lead and lead compounds

4,4'- Diaminodiphenylmethane

Dibutyl phthalate Cyclododecane Cobalt dichloride Diarsenic pentaoxide Diarsenic trioxide Sodium dichromate, dihydrate Tributyl Tin Oxide (TBTO)

Polychlorinated Naphthalenes ( > 3 chlorine atoms)

Tributyl Tin (TBT) and Triphenyl Tin (TPT)

Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)

Perfluorooctane Sulphonate (PFOS) or related compounds

Ozone Depleting Substances - Class II (HCFCs)

Polychlorinated Biphenyls (PCBs)

Radioactive Substances

5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene) Bis (2-ethyl(hexyl)phthalate) (DEHP) Hexabromocyclododecane (HBCDD)

Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)

Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including DecaBDE

Bis(tributyltin)oxide Lead hydrogen arsenate Triethyl arsenate Benzyl butyl phthalate

<sup>\*</sup> 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.