

Diodes Inc. Material Data Sheet

Rev: August 2008

p= 7, 13 BAV170-(p)-F, BAV199-(p)-F, BAV23A-(p)-F, BAV23C-(p)-F. BAV3SC-(p)-F. BAV770-(p)-F. BAW156-(p)-F. BAW56-(p)-F. BAW56-(p)-F. MMBD3004A-(p)-F. Part Number: SOT-23 Switching Diodes (Dual) p = package designator Weight (mg): See Data Sheet 8.54

				MMBD3004A-(p)-F, MMBD3004C-(p)-F.				
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%	3.96	0.3379	1000000	39567
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	28.61	2.4432	576500	164932
		Ni	7440-02-0	41.00%			410000	117298
		Mn	7439-96-5	0.60%			6000	1717
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	286
		Со	7440-48-4	0.50%			5000	1430
		Si	7440-21-3	0.15%			1500	429
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	1.21	0.1034	1000000	12108
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	0.19	0.0164	1000000	1920
Encapsulation	CEL-1620HF-9	Silica	60676-86-0	77.00%	63.04	5.3835	770000	485403
		Basic Duromer: Epoxy resin (Compound of a polymeric network)		11.00%			110000	69343
		Basic Duromer:Phenolic resin (Compound of polymeric network)		6.60%			66000	41606
		Misc.	system	5.00%			50000	31520
		Carbon black	1333-86-4	0.40%			4000	2522
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	2.99	0.2555	1000000	29918
	•			Total	100.00	8.54		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

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

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

 $Polybrominated\ biphenyls\ (PBB)\ and\ Polybrominated\ diphenyl\ ethers\ (PBDE)\ includin \textbf{\textit{DecaBDE}}$

Polychlorinated Biphenyls (PCBs)

Polychlorinated Naphthalenes (> 3 chlorine atoms)

Radioactive Substances

Tributyl Tin (TBT) and Triphenyl Tin (TPT)

Tributyl Tin Oxide (TBTO)

^{*} 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.