

Diodes Inc. Material Data Sheet

Rev: August 2008

MMBTA05-7-F, MMBTA06-7-F, MMBTA13-7-F, MMBTA14-13-F, MMBTA14-7-F, MMBTA28-13-F, MMBTA28-13-F, MMBTA28-7-F, MMBTA55-7-F, MMBTA55-7-F, MMBTA55-7-F, MMBTA55-7-F, MMBTA92-7-F Part Number: MMBTAxxx Date Code 0833+ Part Numbers: Weight (mg): 8.52

						MMB I A64-7-F	, MMBTA92-13-F, MN	IB I A92-7-F
Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Materal(%)		Mass (mg)	ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	2.95	0.25	1000000	29504
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	28.67	2.44	576500	165300
		Ni	7440-02-0	41.00%			410000	117559
		Mn	7439-96-5	0.60%			6000	1720
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	287
		Со	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	12135
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	0.30	0.03	1000000	3004
Encapsulation	CEL-1620HF-9	Silica	60676-86-0	77.00%	63.86	5.44	770000	49175
		Basic Duromer: Epoxy resin (Compound of a polymeric network)		11.00%			110000	7025
		Basic Duromer:Phenolic resin (Compound of polymeric network)		6.60%			66000	42150
		Misc.	system	5.00%			50000	31932
		Carbon black	1333-86-4	0.40%			4000	255
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	3.00	0.26	1000000	2998
		•		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

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) includin 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.