

Part Numbers: **MMBD4148W-p-F** **MMBD4448HW-p-F** **MMBD4448W-p-F**, **p = package designator**  
**MMST4124-p-F** **MMST4126-p-F** **MMST4401-p-F** See Data Sheet

Weight (mg): 6.2182

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Material(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	1.09	0.0676	1000000	10871
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	26.79	1.666	576500	154458
		Ni	7440-02-0	41.00%			410000	109849
		Mn	7439-96-5	0.60%			6000	1608
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	268
		Co	7440-48-4	0.50%			5000	1340
		Si	7440-21-3	0.15%			1500	402
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	1.01	0.0629	1000000	10115
Bond Wire	Copper Wire	Cu	7440-50-8	100.00%	0.09	0.0057	1000000	917
Encapsulation	CEL-1702HF-9	Silicon dioxide	14808-60-7	87.30%	67.39	4.1902	873000	588280
		Basic Duromer: Epoxy resin (Compound of a polymeric network)	129915-35-1	5.00%			50000	33693
		Basic Duromer: Phenolic resin (Compound of polymeric network)	26834-02-6	5.00%			50000	33693
		Misc.	system	2.50%			25000	16847
		Carbon black	1333-86-4	0.20%			2000	1348
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	3.63	0.2258	1000000	36313
				<b>Total</b>	<b>100.00</b>	<b>6.2182</b>		<b>1000000</b>

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 of 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	Organic tin compounds
Antimony Compounds	Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)
Azo compounds	Ozone Depleting Substances - Class II (HCFCs)
Cadmium and cadmium compounds	Perfluorooctane Sulphonate (PFOS) or related compounds
Certain Shortchain Chlorinated Paraffins	Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including DecaBDE
Chlorinated organic compounds	Polychlorinated Biphenyls (PCBs)
Dimethyl fumarate	Polychlorinated Naphthalenes (> 3 chlorine atoms)
Halogens (Bromine, Chlorine, Fluorine, Iodine and Astatine)	Radioactive Substances
Hexavalent chromium compounds	Red Phosphorus
Lead and lead compounds	Tributyl Tin (TBT) and Triphenyl Tin (TPT)
Mercury and mercury compounds	Tributyl Tin Oxide (TBTO)

REACH SVHCs: