

Part Number: **BAT54-p-F, BAT54A-p-F, BAT54S-p-F**
 Weight (mg): 8.48
 (HF Date Code Limited)

p=package designator
 See Data Sheet

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%	0.51	0.04	1000000	5105
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	28.80	2.44	576500	166046
		Ni	7440-02-0	41.00%			410000	118090
		Mn	7439-96-5	0.60%			6000	1728
		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	CEL-1702HF-9	SiO2	60676-86-0	87.30%	66.39	5.63	873000	579554
		Epoxy Resin	29690-82-2	5.00%			50000	33193
		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

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:

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| 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) |
| Halogens | Polychlorinated Naphthalenes (> 3 chlorine atoms) |
| Hexavalent chromium compounds | Radioactive Substances |
| Lead and lead compounds | Tributyl Tin (TBT) and Triphenyl Tin (TPT) |
| Mercury and mercury compounds | Tributyl Tin Oxide (TBTO) |

REACH SVHCs:

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|------------------------------|---|
| Anthracene | 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene) |
| 4,4'- Diaminodiphenylmethane | Bis (2-ethyl(hexyl)phthalate) (DEHP) |
| Dibutyl phthalate | Hexabromocyclododecane (HBCDD) |
| Cyclododecane | Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) |
| Cobalt dichloride | Bis(tributyltin)oxide |
| Diarsenic pentaoxide | Lead hydrogen arsenate |
| Diarsenic trioxide | Triethyl arsenate |
| Sodium dichromate, dihydrate | Benzyl butyl phthalate |