

Part Number: **BC846xW-p-F, BC847xW-p-F, BC848xW-p-F**  
**BC856xW-p-F, BC857xW-p-F, BC858xW -p-F**  
 Weight (mg): 6.22  
 (HF Date Code Limited)

p=package designator  
See Data Sheet

x = A, B or C

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%	0.97	0.06	1000000	9659
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	26.78	1.67	576500	154361
		Ni	7440-02-0	41.00%			410000	109780
		Mn	7439-96-5	0.60%			6000	1607
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	268
		Co	7440-48-4	0.50%			5000	1339
		Si	7440-21-3	0.15%			1500	402
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	1.01	0.06	1000000	10109
Bond Wire	Copper Wire	Cu	7440-50-8	100.00%	0.18	0.01	1000000	1848
Encapsulation	CEL-1702HF-9	SiO2	60676-86-0	87.30%	67.43	4.20	873000	588697
		Epoxy Resin	29690-82-2	5.00%			50000	33717
		Phenol Resin	26834-02-6	5.00%			50000	33717
		Aromatic poly-phosphate	----	2.50%			25000	16858
		C	1333-86-4	0.20%			2000	1349
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	3.63	0.23	1000000	36290
					<b>Total</b>	<b>100.00</b>	<b>6.22</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)
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:

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