

Part Number: BC8xxx SOT-23 (Date Code 0833+) Weight (mg): 8.50									Part Numbers: BC807-16-7-F, BC807-25-7-F, BC807-40-7-F, BC817-16-7-F, BC817-25-7-F, BC817-40-7-F, BC846A-7-F, BC846B-13-F, BC846B-7-F, BC847A-13-F, BC847A-7-F, BC847B-13-F, BC847B-7-F, BC847BLD-7, BC847C-13-F, BC847C-7-F, BC848A-7-F, BC848B-7-F, BC848C-7-F, BC856A-7-F, BC856B-13-F, BC856B-7-F, BC857A-7-F, BC857B-13-F, BC857B-7-F, BC857C-13-F, BC857C-7-F, BC858A-7-F, BC858B-7-F, BC858C-7-F								
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%	0.85	0.07	1000000	8510									
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	28.76	2.44	576500	165794									
		Ni	7440-02-0	41.00%			410000	117911									
		Mn	7439-96-5	0.60%			6000	1726									
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	288									
		Co	7440-48-4	0.50%			5000	1438									
		Si	7440-21-3	0.15%			1500	431									
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	1.22	0.10	1000000	12171									
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	0.19	0.02	1000000	1930									
Encapsulation	KTMC-1050G	SiO2	60676-86-0	69.00%	65.97	5.60	690000	455211									
		Epoxy Resin	29690-82-2	14.00%			140000	92362									
		Phenol Resin	9003-35-4	7.00%			70000	46181									
		Mg(OH)2	1309-42-8	8.00%			80000	52778									
		C	1333-86-4	0.20%			2000	1319									
		others	----	1.80%			18000	11875									
		Tin	7440-31-5	100.00%			3.01	0.26	1000000	30075							
Total				100.00	100.00	8.50		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:

- | | |
|--|---|
| Asbestos | 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 p,p'-DDE |
| Chlorinated organic compounds | Polychlorinated Biphenyls (PCBs) |
| Hexavalent chromium compounds | Polychlorinated Naphthalenes (> 3 chlorine atoms) |
| Lead and lead compounds | Radioactive Substances |
| Mercury and mercury compounds | Tributyl Tin (TBT) and Triphenyl Tin (TPT) |
| Organic tin compounds | Tributyl Tin Oxide (TBTO) |

Part Number: BC8xxx SOT-23 (Date Code Pending) Weight (mg): 8.45									Part Numbers: BC807-16-7-F, BC807-25-7-F, BC807-40-7-F, BC817-16-7-F, BC817-25-7-F, BC817-40-7-F, BC846A-7-F, BC846B-13-F, BC846B-7-F, BC847A-13-F, BC847A-7-F, BC847B-13-F, BC847B-7-F, BC847BLD-7, BC847C-13-F, BC847C-7-F, BC848A-7-F, BC848B-7-F, BC848C-7-F, BC856A-7-F, BC856B-13-F, BC856B-7-F, BC857A-7-F, BC857B-13-F, BC857B-7-F, BC857C-13-F, BC857C-7-F, BC858A-7-F, BC858B-7-F, BC858C-7-F								
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%	0.86	0.07	1000000	8510									
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	28.91	2.44	576500	165794									
		Ni	7440-02-0	41.00%			410000	117911									
		Mn	7439-96-5	0.60%			6000	1726									
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	288									
		Co	7440-48-4	0.50%			5000	1438									
		Si	7440-21-3	0.15%			1500	431									
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	1.22	0.10	1000000	12171									
Bond Wire	Copper Wire	Copper	7440-50-8	100.00%	0.17	0.01	1000000	1930									
Encapsulation	KTMC-1050G	SiO2	60676-86-0	69.00%	65.82	5.56	690000	455211									
		Epoxy Resin	29690-82-2	14.00%			140000	92362									
		Phenol Resin	9003-35-4	7.00%			70000	46181									
		Mg(OH)2	1309-42-8	8.00%			80000	52778									
		C	1333-86-4	0.20%			2000	1319									
		others	----	1.80%			18000	11875									
		Tin	7440-31-5	100.00%			3.02	0.26	1000000	30235							
Total				100.00	100.00	8.45		1000160									

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 | 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 p,p'-DDE |
| Chlorinated organic compounds | Polychlorinated Biphenyls (PCBs) |
| Hexavalent chromium compounds | Polychlorinated Naphthalenes (> 3 chlorine atoms) |
| Lead and lead compounds | Radioactive Substances |
| Mercury and mercury compounds | Tributyl Tin (TBT) and Triphenyl Tin (TPT) |
| Organic tin compounds | Tributyl Tin Oxide (TBTO) |