Part Number: **BZT52CxxS-p-F** p = package designator xx= **10, 11, 12, 13, 15, 16, 18, 20, 22, 24, 27, 2V0, 2V4, 2V7, 30, 33, 36, 39, 3V0, 3V3, 3V6, 3V9, 4V3, 4V7, 5V1, 51, 5V6, 6V2, 6V8, 7V5, 7V8, 8V2, 9V1**
Weight (mg): 5.263
(HF Date Code 0832+)

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Materal(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	0.01	0.0676	1000000	12883
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	0.24	1.2809	576500	140727
		Ni	7440-02-0	41.00%			410000	100084
		Mn	7439-96-5	0.60%			6000	1465
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	244
		Co	7440-48-4	0.50%			5000	1221
		Si	7440-21-3	0.15%			1500	366
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	0.01	0.0505	1000000	9624
Bond Wire	Gold Wire	Gold	7440-57-5	100.00%	0.00	0.0076	1000000	1448
Encapsulation	KTMC-1050G	SiO2	60676-86-0	69.00%	0.70	3.6866	690000	484774
		Epoxy Resin	29690-82-2	14.00%			140000	98360
		Phenol Resin	9003-35-4	7.00%			70000	49180
		Mg(OH)2	1309-42-8	8.00%			80000	56206
		C	1333-86-4	0.20%			2000	1405
		others	----	1.80%			18000	12646
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	0.03	0.1541	1000000	29367
				Total	100.00	5.2473		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 abo

Antimony compounds
Asbestos
Azo compounds
Cadmium and cadmium compounds
Certain Shortchain Chlorinated Paraffins
Chlorinated organic compounds
Halogens
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) including **DecaBDE**
Polychlorinated Biphenyls (PCBs)
Polychlorinated Naphthalenes (> 3 chlorine atoms)
Radioactive Substances
Tributyl Tin (TBT) and Triphenyl Tin (TPT)
Tributyl Tin Oxide (TBTO)

This product or product family meet REACH requirements for chemicals designated by the European Chemicals Agency (ECHA) as Substances of Very High Concern (SVHC) appended below:

Anthracene
4,4'- Diaminodiphenylmethane
Dibutyl phthalate (DBP)
Cyclododecane
Cobalt dichloride
Diarsenic pentaoxide
Diarsenic trioxide
Sodium dichromate, dihydrate

Bis (2-ethyl(hexyl)phthalate) (DEHP)
Hexabromocyclododecane (HBCDD)
Bis(tributyltin)oxide (TBTO)
Lead hydrogen arsenate
Triethyl arsenate
Benzyl butyl phthalate (BBP)
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)
Alkanes, C10-13, chloro (SCCPs - Short Chain Chlorinated Paraffins)

Part Number: **BZT52CxxS-p-F** p = package designator xx= **10, 11, 12, 13, 15, 16, 18, 20, 22, 24, 27, 2V0, 2V4, 2V7, 30, 33, 36, 39, 3V0, 3V3, 3V6, 3V9, 4V3, 4V7, 5V1, 51, 5V6, 6V2, 6V8, 7V5, 7V8, 8V2, 9V1**
Weight (mg): 5.263
(HF Date Code 0850+)

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Materal(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	0.01	0.0676	1000000	12883
Leadframe	Alloy 42	Fe	7439-89-6	57.65%	0.24	1.2809	576500	140727
		Ni	7440-02-0	41.00%			410000	100084
		Mn	7439-96-5	0.60%			6000	1465
		Cr(not Cr 6+)	7440-47-3	0.10%			1000	244
		Co	7440-48-4	0.50%			5000	1221
		Si	7440-21-3	0.15%			1500	366
Leadframe Plating	Silver	Silver	7440-22-4	100.00%	0.01	0.0505	1000000	9624
Bond Wire	Copper Wire	Cu	7440-50-8	100.00%	0.00	0.0055	1000000	1448
Encapsulation	KTMC-1050G	SiO2	60676-86-0	69.00%	0.70	3.7002	690000	484774
		Epoxy Resin	29690-82-2	14.00%			140000	98360
		Phenol Resin	9003-35-4	7.00%			70000	49180
		Mg(OH)2	1309-42-8	8.00%			80000	56206
		C	1333-86-4	0.20%			2000	1405
		others	----	1.80%			18000	12646
Lead Plating Finish	Matte Tin	Tin	7440-31-5	100.00%	0.03	0.1541	1000000	29303
				Total	100.00	5.2588		999936

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 Titaniun 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

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:

Antimony compounds
Asbestos
Azo compounds
Cadmium and cadmium compounds
Certain Shortchain Chlorinated Paraffins
Chlorinated organic compounds
Halogens
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) including **DecaBDE**
Polychlorinated Biphenyls (PCBs)
Polychlorinated Naphthalenes (> 3 chlorine atoms)
Radioactive Substances
Tributyl Tin (TBT) and Triphenyl Tin (TPT)
Tributyl Tin Oxide (TBTO)

This product or product family meet REACH requirements for chemicals designated by the European Chemicals Agency (ECHA) as Substances of Very High Concern (SVHC) appended below:

Anthracene
4,4'- Diaminodiphenylmethane
Dibutyl phthalate (DBP)
Cyclododecane
Cobalt dichloride
Diarsenic pentaoxide
Diarsenic trioxide
Sodium dichromate, dihydrate

Bis (2-ethyl(hexyl)phthalate) (DEHP)
Hexabromocyclododecane (HBCDD)
Bis(tributyltin)oxide (TBTO)
Lead hydrogen arsenate
Triethyl arsenate
Benzyl butyl phthalate (BBP)
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)
Alkanes, C10-13, chloro (SCCPs - Short Chain Chlorinated Paraffins)