

No.	Construction Element(subpart)	Homogeneous Material	Material weight [g]	Homogeneous Material\ Substances	CASRN if applicable	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)	
1	Housing	Valox 420 SEO	8.7	PBT	30965-26-5	55	6.96	12.65	
				glass fiber	65997-17-3	30	3.80		
				antimony trioxide	1309-64-4	4	0.51		
				TBBPA polycarbonate	secret	11	1.39		
2	Terminal block	Nylon insulation - PA66	1.26	Polyamide 66	32131-17-2	100	1.83	1.83	
		Terminal body	1.7	Copper	7440-50-8	70	1.73	2.47	
				Zinc	7440-66-6	30	0.74		
		Terminal finish	0.007	Nickel	7440-02-0	10	0.00	0.01	
				Tin	7440-31-5	90	0.01		
		Zinc screw	1	Zinc	7440-66-6	100	1.45	1.45	
		Wire protector	0.2	Copper	7440-50-8	70	0.20	0.29	
		Tin	7440-31-5	30	0.09				
Wire protector finish	0.001	Tin	7440-31-5	100	0.00	0.00			
3	washer 1	Stainless steel	0.1	Iron	7439-89-6	87	0.13	0.15	
				Chrome	7440-47-3	13	0.02		
4	screw 1	Stainless steel	0.2	Iron	7439-89-6	72	0.21	0.29	
				Chrome	7440-47-3	17.6	0.05		
				Nickel	7440-02-0	10.4	0.03		
5	Pin	Tin plate Brass	0.2	copper	7440-50-8	93.1	0.27	0.29	
				zinc	7440-66-6	5	0.01		
				Tin	7440-31-5	1.9	0.01		
				Copper	7440-50-8	65.7	6.02		
6	P. Standoff	Tin plate Alloy C36000	6.3	Zinc	7440-66-6	33	3.02	9.16	
				Lead	7439-92-1	1	0.09		
				Tin	7440-31-5	0.3	0.03		
				Copper	7440-50-8	61.1	1.78		
7	P. Standoff thread	Tin plate Alloy C36000	2.0	Zinc	7440-66-6	35.5	1.03	2.91	
				Lead	7439-92-1	3	0.09		
				Tin	7440-31-5	0.4	0.01		
				Copper	7440-50-8	61.1	1.78		
8	Bolt retainer	Phosphate - oil finish spring steel	0.1	Iron	7439-89-6	92	0.13	0.15	
				Zinc	7440-66-6	8	0.01		
				copper	7440-50-8	69.1	0.30		
9	link	Tin plate Brass	0.3	zinc	7440-66-6	28	0.12	0.44	
				Tin	7440-31-5	2.9	0.01		
				Iron	7439-89-6	72	0.05		
10	washer 2	Stainless steel	0.05	Chrome	7440-47-3	17.6	0.01	0.07	
				Nickel	7440-02-0	10.4	0.01		
				copper	7440-50-8	70	0.05		
11	washer 3	Tin plate Brass	0.05	zinc	7440-66-6	28	0.02	0.07	
				Tin	7440-31-5	2.0	0.00		
				copper	7440-50-8	70	0.51		
12	washer 4	Tin plate Brass	0.5	zinc	7440-66-6	29.1	0.21	0.73	
				Tin	7440-31-5	0.9	0.01		
				Iron	7439-89-6	79	4.25		
13	screw 2	Stainless steel	3.7	Chrome	7440-47-3	15	0.81	5.38	
				Nickel	7440-02-0	6	0.32		
				Iron	7439-89-6	98.6	17.35		
14	Clamp 1	Tin/lead plate rolled steel	12.1	Tin	7440-31-5	1.2	0.21	17.60	
				Lead	7439-92-1	0.2	0.04		
				Iron	7439-89-6	98	10.26		
15	Clamp 2	Tin/lead plate rolled steel	7.2	Tin	7440-31-5	1.7	0.18	10.47	
				Lead	7439-92-1	0.3	0.03		
				Iron	7439-89-6	98.6	17.35		
16	Filler material	Epoxy	9	Bishenol A/Epichlorohydrin	25068-38-6	28.0	3.67	13.09	
				2 N-butyl glycidyl	02426-08-6	8.0	1.05		
				Aluminum trihydrate	21645-51-2	20.0	2.62		
				Decabromodiphenyl oxide	01163-19-5	12.0	1.57		
				Zinc borate	013332-07-6	4.0	0.52		
				Antimony trioxide	01309-64-4	4.0	0.52		
				Fumed silica	07631-86-9	4.0	0.52		
				Amides	68443-08-3	8.0	1.05		
				Aminoethyl	00140-31-8	5.0	0.65		
				Nonylphenol	25154-52-3	5.0	0.65		
Tetraethylenepentamine	00112-57-2	2.0	0.26						
17	Dice	Silicon with metal	0.004650	Silicon	7440-21-3	98.0	0.01	0.01	
				Nickel	7440-02-0	2.0	0.00		
	High melting point solder	Tin-lead solder	0.002325		Lead	7439-92-1	93.6	0.00	0.00
					tin	7440-31-5	5.0	0.00	
	Lead frame clip	Copper alloy	0.039900		silver	7440-22-4	1.4	0.00	0.06
					copper	7440-50-8	97.8	0.06	
	Mold compound	Epoxy material	0.045570		Iron	7439-89-6	2.1	0.00	0.07
					silica	7631-86-9	70.0	0.05	
					epoxy resin	68928-70-1	20.0	0.01	
					antimony trioxide	1309-64-4	4.9	0.00	
Plating cover	Tin solder	0.000930		Phenolic resin	29690-62-2	5.1	0.00	0.00	
				Tin	7440-31-5	100.0	0.00		
Semiconductor Device	Silicon chip	0.01		doped silicon	7440-21-3	100.0	0.01	0.01	
				copper	7440-50-8	97.3	0.07		
				Chromium III	7440-47-3	0.3	0.00		

18	Lead frame	Copper alloy with silver plating	0.05	Tin	7440-31-5	0.3	0.00	0.07
				zinc	7440-66-6	0.2	0.00	
				Silver	7440-22-4	2.0	0.00	
	Bondwire	Gold wire	0.00	Gold	7440-57-5	100	0.00	0.00
	Die attach	Adhesive	0.00	Di-ester resin	secret	3	0.00	0.00
				Functionaziled ester	secret	7	0.00	
				polymeric compound	secret	3	0.00	
	Mold compound	Epoxy resin	0.04	Silver	7440-22-4	87	0.00	0.05
				Silica fused	60676-86-0	90.5	0.05	
				epoxy resin	secret	4.7	0.00	
Phenolic resin				secret	4.7	0.00		
Matte tin plate	Matte tin	0.00	Carbon black	1333-86-4	0.1	0.00	0.00	
			Tin	7440-31-5	100	0.00		
19	Dice	Silicon with metal	0.004650	Silicon	7440-21-3	98.0	0.01	0.01
				Nickel	7440-02-0	2.0	0.00	
	High melting point solder	Tin-lead solder	0.002325	Lead	7439-92-1	93.6	0.00	0.00
				tin	7440-31-5	5.0	0.00	
				silver	7440-22-4	1.4	0.00	
	Lead frame clip	Copper alloy	0.039900	copper	7440-50-8	97.8	0.06	0.06
				Iron	7439-89-6	2.1	0.00	
	Mold compound	Epoxy material	0.045570	silica	7631-86-9	70.0	0.05	0.07
				epoxy resin	68928-70-1	20.0	0.01	
				antimony trioxide	1309-64-4	4.9	0.00	
Phenolic resin				29690-82-2	5.1	0.00		
Plating cover	Tin solder	0.000930	Tin	7440-31-5	100.0	0.00	0.00	
20	PCB material	FR4	3.6	Copper	7440-50-8	20	1.05	5.24
				Epoxy resin	26265-08-7	40	2.09	
				Continuous filament fiber glass	65997-17-3	40	2.09	
				Tin	7440-31-5	63	0.21	
	Tin plate	Tin/lead	0.23	lead	7439-92-1	37	0.12	0.33
				Phenolic resin	61788-97-4	32	0.10	
	Solder ink	ink	0.23	DBE	95481-62-2	25	0.08	0.33
				Barium sulfate	7727-43-7	25	0.08	
				Silica	10279-57-9	3	0.01	
				DPHA	29570-58-9	15	0.05	
electronic copper	copper	0.45	Copper	7440-50-8	100	0.65	0.65	
21	Solder Paste	Solder paste 96.5 Sn, 3.5 Ag	0.1	Tin	7440-31-5	96.5	0.14	0.15
				Silver	7440-22-4	3.5	0.01	
22	lateral electrodes	Kovar	1.36	Iron	7439-89-6	58	1.15	1.98
				nickel	7440-02-0	42	0.83	
	Substrate	Ceramic	0.84	Alumina	1344-28-1	95	1.16	1.22
				Silicon dioxide	1344-28-1	5	0.06	
	Central electrode	Copper	0.47	Copper	7440-50-8	100	0.68	0.68
Filler material	Cusil	0.4	silver	7440-22-4	72	0.42	0.58	
			Copper	7440-50-8	28	0.16		
Tin plate	Tin	0.04	Tin	7440-31-5	100	0.06	0.06	
23	lateral electrodes	Kovar	0.48	Iron	7439-89-6	58	0.40	0.70
				nickel	7440-02-0	42	0.29	
	Substrate	Ceramic	0.46	Alumina	1344-28-1	95	0.64	0.67
				Silicon dioxide	1344-28-1	5	0.03	
	Filler material	Cusil	0.2	silver	7440-22-4	72	0.21	0.29
Copper				7440-50-8	28	0.08		
Tin plate	Tin	0.05	Tin	7440-31-5	100	0.07	0.07	
24	Sealant	Silicone elastomer	4.9	dimethyl siloxane	70131-67-8	60	4.28	7.13
				Trimethylated silica	68909-20-6	30	2.14	
				Methyltrimethoxysilane	1185-55-3	10	0.71	
total			68.8					100.00