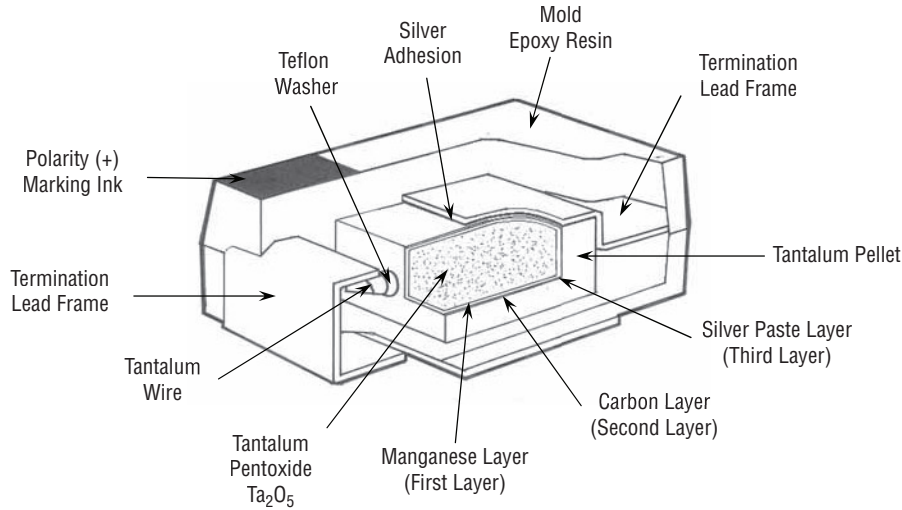


Tantalum Capacitor Material Composition

SIZE: A Case (3216)

Weight (g): 0.026



Material Part	Materials	Weight (g)	% of part	% of component	CAS No
Tantalum Pellet	Tantalum	0.00765	100	29.42	7440 - 25 - 7
	Subtotal	0.00765	100	29.42	
Tantalum Wire	Tantalum	0.00057	100	2.19	7440 - 25 - 7
	Subtotal	0.00057	100	2.19	
Teflon Washer	TETRAFLUOROETHYLENE - PERFLUORO	0.0001	100	0.38	26655 - 00 - 5
	Subtotal	0.0001	100	0.38	
Manganese Layer	Mn - (N - O3)2	0.0016	100	6.15	10377 - 66 - 9
	Subtotal	0.0016	100	6.15	
Carbon Layer	GRAPHITE	0.0003	20	1.154	7782 - 42 - 5
	WATER	0.00114	76	4.385	7732 - 18 - 5
	AMMONIUM HYDROXIDE	0.00006	4	0.231	1336 - 21 - 6
	Subtotal	0.0015	100	5.77	
Silver paste Layer	1 - METHOXY - 2 - PROPANOL ACETATE	0.0002265	15	0.871	108 - 65 - 6
	Glycol ether solvent	0.0002265	15-25	0.871	Proprietary
	TERT - BUTYL ACETATE	0.000302	20	1.162	540 - 88 - 5
	Silver	0.0006795	45	2.613	7440 - 22 - 4
	N - AMYL ACETATE	0.0000755	5	0.29	628 - 63 - 7
	Resin polymerized	0	0~5	0.00	Proprietary
	Subtotal	0.00151	100	5.81	

Tantalum Capacitor Material Composition

SIZE: A Case (3216) continued

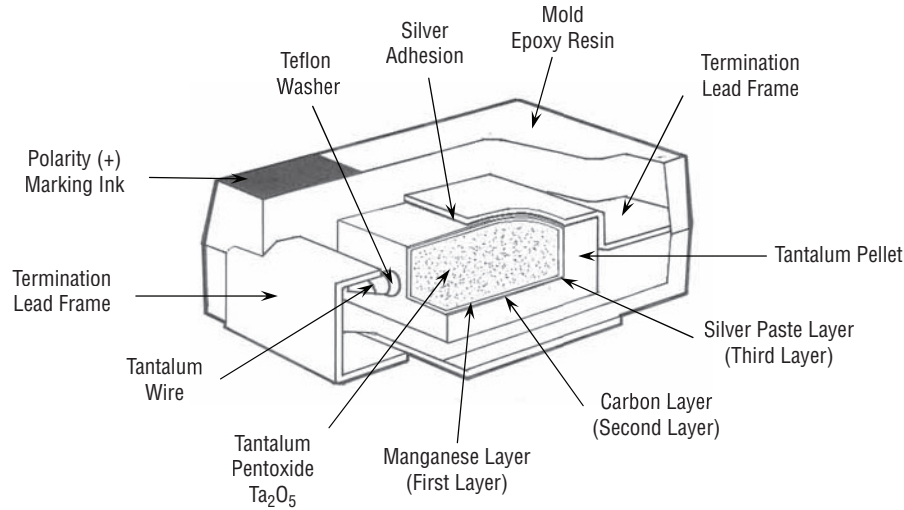
Weight (g): 0.026

Material Part	Materials	Weight (g)	% of part	% of component	CAS No
Termination - Lead Frame	Ni	0.001968	41	7.569	7440 - 02 - 0
	Mn	0.000024	0.5	0.092	7439 - 96 - 5
	Si	0.0000096	0.2	0.037	7440 - 21 - 3
	C	0.00000096	0.02	0.004	7440 - 44 - 0
	Fe	0.00259104	53.98	9.966	7439 - 86 - 6
	Sn	0.00020640	4.30	0.794	7440 - 31 - 5
	Subtotal	0.0048	100	18.46	
Silver Adhesion	Epoxy Resin	.00003~.000045	10~15	0.115	9003 - 36 - 5
	r - Butyrolactone	.000012~.00003	4~10	0.046	96 - 48 - 0
	Imidazole	.000003~.000015	1~5	0.012	827 - 43 - 0
	Silver	.000225~.000255	75~85	0.981	7440 - 22 - 4
	Subtotal	0.0003	100	1.15	
Mold - Epoxy Resin	ANTIMONY OXIDE	.000008~.00024	0.1~3.0	0.923	1309 - 64 - 4
	PBBA	.00004~.00024	0.1~3.0	0.923	Proprietary
	Epoxy Resin	.00024~.0016	3.0~20	3.692	Proprietary
	Phenolic Resin	.00016~.0012	2.0~15	3.385	Proprietary
	CARBON BLACK	.000008~.00004	0.1~0.5	0.154	1333 - 86 - 4
	AMORPHOUS SILICA	.0056~.0072	70~90	21.54	60676 - 86 - 0
	CRISTOBALITE	0~.00008	0~1	0.154	14464 - 46 - 1
	Subtotal	0.008	100	30.77	
Marking INK	BLOCKED HEXAMETHYLENE DISOCYANATE POLYMER	0.000012	100	0.46	153519 - 43 - 8
	Subtotal	0.000012	100	0.46	
	ALL PART Total	0.026		100	

Tantalum Capacitor Material Composition

SIZE: B Case (3225)

Weight (g): 0.059



Material Part	Materials	Weight (g)	% of part	% of component	CAS No
Tantalum Pellet	Tantalum	0.0183	100	31.02	7440 - 25 - 7
	Subtotal	0.0183	100	31.02	
Tantalum Wire	Tantalum	0.0008	100	1.36	7440 - 25 - 7
	Subtotal	0.0008	100	1.36	
Teflon Washer	TETRAFLUOROETHYLENE - PERFLUORO	0.00042	100	0.71	26655 - 00 - 5
	Subtotal	0.00042	100	0.71	
Manganese Layer	Mn - (N - O3)2	0.00369	100	6.25	10377 - 66 - 9
	Subtotal	0.00369	100	6.25	
Carbon Layer	GRAPHITE	0.00056	20	0.949	7782 - 42 - 5
	WATER	0.002128	76	3.607	7732 - 18 - 5
	AMMONIUM HYDROXIDE	0.000112	4	0.19	1336 - 21 - 6
	Subtotal	0.0028	100	4.75	
Silver paste Layer	1 - METHOXY - 2 - PROPANOL ACETATE	0.0004155	15	0.704	108 - 65 - 6
	Glycol ether solvent	0.0004155	15-25	0.704	Proprietary
	TERT - BUTYL ACETATE	0.000554	20	0.939	540 - 88 - 5
	Silver	0.0012465	45	2.113	7440 - 22 - 4
	N - AMYL ACETATE	0.0001385	5	0.235	628 - 63 - 7
	Resin polymerized	0	0~5	0.00	Proprietary
	Subtotal	0.00277	100	4.69	

Tantalum Capacitor Material Composition

SIZE: B Case (3225) continued

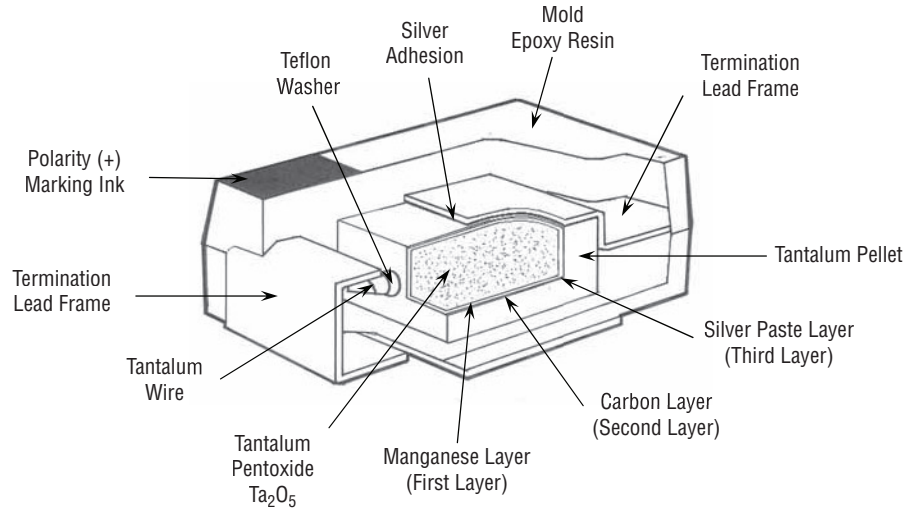
Weight (g): 0.059

Material Part	Materials	Weight (g)	% of part	% of component	CAS No
Termination - Lead Frame	Ni	0.0041	41	6.949	7440 - 02 - 0
	Mn	0.00005	0.5	0.085	7439 - 96 - 5
	Si	0.00002	0.2	0.034	7440 - 21 - 3
	C	0.000002	0.02	0.003	7440 - 44 - 0
	Fe	0.005398	53.98	9.149	7439 - 86 - 6
	Sn	0.000430	4.30	0.729	7440 - 31 - 5
	Subtotal	0.01	100	16.95	
Silver Adhesion	Epoxy Resin	0.00005~0.000075	10~15	0.085	9003 - 36 - 5
	r - Butyrolactone	0.00002~0.00005	4~10	0.034	96 - 48 - 0
	Imidazole	0.000001~0.000025	1~5	0.002	827 - 43 - 0
	Silver	0.000375~0.000425	75~85	0.72	7440 - 22 - 4
	Subtotal	0.0005	100	0.85	
Mold - Epoxy Resin	ANTIMONY OXIDE	0.00002~0.0006	0.1~3.0	1.017	1309 - 64 - 4
	PBBA	0.0001~0.0006	0.5~3.0	1.017	Proprietary
	Epoxy Resin	0.0006~0.004	3.0~20	4.068	Proprietary
	Phenolic Resin	0.0004~0.003	2.0~15	3.729	Proprietary
	CARBON BLACK	0.00002~0.0001	0.1~0.5	0.169	1333-86-4
	AMORPHOUS SILICA	0.014~0.018	70~90	23.73	60676-86-0
	CRISTOBALITE	0~0.0002	0~1	0.169	14464-46-1
	Subtotal	0.02	100	33.9	
Marking INK	BLOCKED HEXAMETHYLENE DIISOCYANATE POLYMER	0.00012	100	0.2	153519-43-8
	Subtotal	0.00012	100	0.2	
	ALL PART Total	0.059		100	

Tantalum Capacitor Material Composition

SIZE: C Case (6032)

Weight (g): 0.160



Material Part	Materials	Weight (g)	% of part	% of component	CAS No
Tantalum Pellet	Tantalum	0.0569	100	35.56	7440-25-7
	Subtotal	0.0569	100	35.56	
Tantalum Wire	Tantalum	0.0026	100	1.63	7440-25-7
	Subtotal	0.0026	100	1.63	
Teflon Washer	TETRAFLUOROETHYLENE - PERFLUORO	0.00042	100	0.26	26655-00-5
	Subtotal	0.00042	100	0.26	
Manganese Layer	Mn - (N - O3)2	0.01	100	6.25	10377-66-9
	Subtotal	0.01	100	6.25	
Carbon Layer	GRAPHITE	0.0014	20	0.875	7782-42-5
	WATER	0.00532	76	3.325	7732-18-5
	AMMONIUM HYDROXIDE	0.00028	4	0.175	1336-21-6
	Subtotal	0.007	100	4.38	
Silver paste Layer	1 - METHOXY - 2 - PROPANOL ACETATE	0.0011685	15	0.73	108-65-6
	Glycol ether solvent	0.0011685	15-25	0.73	Proprietary
	TERT - BUTYL ACETATE	0.001558	20	0.974	540-88-5
	Silver	0.0035055	45	2.191	7440-22-4
	N - AMYL ACETATE	0.0003895	5	0.243	628-03-7
	Resin polymerized	0	0-5	0.00	Proprietary
	Subtotal	0.00779	100	4.87	

Tantalum Capacitor Material Composition

SIZE: C Case (6032) continued

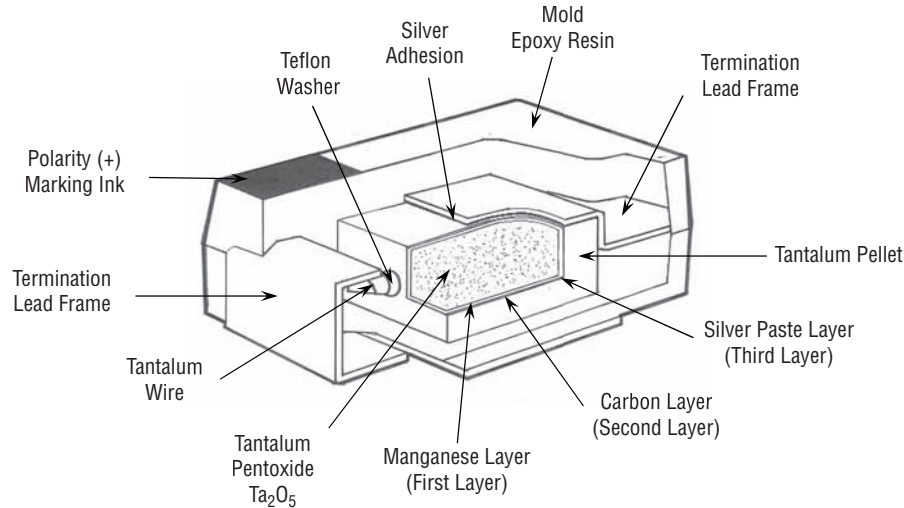
Weight (g): 0.160

Material Part	Materials	Weight (g)	% of part	% of component	CAS No
Termination - Lead Frame	Ni	0.00697	41	4.356	7440-02-0
	Mn	0.000085	0.5	0.053	7439-96-5
	Si	0.000034	0.2	0.021	7440-21-3
	C	0.0000034	0.02	0.002	7440-44-0
	Fe	0.0091766	53.98	5.735	7439-86-6
	Sn	0.0007310	4.30	0.457	7440-31-5
	Subtotal	0.017	100	10.63	
Silver Adhesion	Epoxy Resin	0.00008~0.00012	10~15	0.05	9003-36-5
	r - Butyrolactone	0.000032~0.00008	4~10	0.02	96-48-0
	Imidazole	0.000008~0.00004	1~5	0.005	827-43-0
	Silver	0.0006~0.00068	75-85	0.425	7440-22-4
	Subtotal	0.0008	100	0.5	
Mold - Epoxy Resin	ANTIMONY OXIDE	0.000057~0.00171	0.1-3.0	1.069	1309-64-4
	PBBA	0.000285~0.00171	0.5-3.0	1.069	Proprietary
	Epoxy Resin	0.00171~0.0114	3.0-20	4.275	Proprietary
	Phenolic Resin	0.00114~0.00855	2.0-15	3.919	Proprietary
	CARBON BLACK	0.000057~0.000285	0.1-0.5	0.178	1333-86-4
	AMORPHOUS SILICA	0.0399~0.0513	70-90	24.94	60676-86-0
	CRISTOBALITE	0-0.00057	0-1	0.178	14464-46-1
	Subtotal	0.057	100	35.63	
Marking INK	BLOCKED HEXAMETHYLENE DISOCYANATE POLYMER	0.00012	100	0.08	153519-43-8
	Subtotal	0.00012	100	0.08	
	ALL PART Total	0.16		100	

Tantalum Capacitor Material Composition

SIZE: D & E Case (7343, 7343H)

Weight (g): 0.304



Material Part	Materials	Weight (g)	% of part	% of component	CAS No
Tantalum Pellet	Tantalum	0.121	100	39.93	7440-25-7
Subtotal		0.121	100	39.93	
Tantalum Wire	Tantalum	0.0035	100	1.089	7440-25-7
Subtotal		0.0035	100	1.089	
Teflon Washer	TETRAFLUOROETHYLENE - PERFLUORO	0.00042	100	0.138	26655-00-5
Subtotal		0.00042	100	0.138	
Manganese Layer	Mn - (N - O3)2	0.019	100	6.27	10377-66-9
Subtotal		0.019	100	6.27	
Carbon Layer	GRAPHITE	0.0036	20	1.188	7782-42-5
	WATER	0.01368	76	4.515	7732-18-5
	AMMONIUM HYDROXIDE	0.00072	4	0.238	1336-21-6
Subtotal		0.018	100	5.94	
Silver paste Layer	1 - METHOXY - 2 - PROPANOL ACETATE	0.00225	15	0.743	108-65-6
	Glycol ether solvent	0.00225	15-25	0.743	Proprietary
	TERT - BUTYL ACETATE	0.003	20	0.99	540-88-5
	Silver	0.00675	45	2.228	7440-22-4
	N - AMYL ACETATE	0.00075	5	0.248	628-63-7
	Resin polymerized	0	0-5	0.00	Proprietary
Subtotal		0.015	100	4.95	

Tantalum Capacitor Material Composition

SIZE: D & E Case (7343, 7343H) continued

Weight (g): 0.304

Material Part	Materials	Weight (g)	% of part	% of component	CAS No
Termination - Lead Frame	Ni	0.00943	41	3.112	7440-02-0
	Mn	0.000115	0.5	0.038	7439-96-5
	Si	0.000046	0.2	0.015	7440-21-3
	C	0.0000023	0.02	0.001	7440-44-0
	Fe	0.0124	53.98	4.092	7439-86-6
	Sn	0.00099	4.3	0.327	7440-31-5
Subtotal		0.023	100	7.59	
Silver Adhesion	Epoxy Resin	0.00019~0.000285	10~15	0.0627	9003-36-5
	r - Butyrolactone	0.000076~0.00019	4~10	0.0251	96-48-0
	Imidazole	0.000019~0.000095	1~5	0.0063	827-43-0
	Silver	0.00143~0.001615	75~85	0.533	7440-22-4
Subtotal		0.0019	100	0.627	
Mold - Epoxy Resin	ANTIMONY OXIDE	0.000102~0.00306	0.1~3.0	1.009	1309-64-4
	PBBA	0.00051~0.00306	0.5~3.0	1.009	Proprietary
	Epoxy Resin	0.00306~0.0204	3.0~20	4.03	Proprietary
	Phenolic Resin	0.00204~0.0153	2.0~15	3.7	Proprietary
	CARBON BLACK	0.000102~0.00051	0.1~0.5	0.168	1333-86-4
	AMORPHOUS SILICA	0.0714~0.0918	70~90	23.56	60676-86-0
	CRISTOBALITE	0~0.00102	0~1	0.168	14464-46-1
Subtotal		0.102	100	33.66	
Marking INK	BLOCKED HEXAMETHYLENE DISOCYANATE POLYMER	0.00015	100	0.05	153519-43-8
	Subtotal	0.00015	100	0.05	
ALL PART Total		0.304		100	