


MATERIAL DECLARATION SHEET



Material Number	3549H-1AF-103A			
Product Line	Precision Potentiometer			
Compliance Date	Since Inception			
RoHS Compliant	Yes	MSL	N/A	

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	Wiper terminal	Brass	0.2640	Copper	7440-50-8	70	0.85995	1.2285
				Zinc	7440-66-6	30	0.36855	
		Under plating	0.0120	Nickel	7440-02-0	100	0.0558	0.0558
		Finish plating	0.0026	Gold	7440-57-5	100	0.0121	0.0121
2	Rear Cover	Nylon	1.2550	Polyamide 66 + Polyamide 6	32131-17-2 25038-54-4	43	2.511114	5.8398
				Tetrafluoroethylene polymer	9002-84-0	13	0.759174	
				Glass fiber	65997-17-3	40	2.33592	
				Silicon	7440-21-3	2	0.116796	
				Carbon black	1333-86-4	2	0.116796	
3	Slider	Nylon	0.2380	Polyamide 66 + Polyamide 6	32131-17-2 25038-54-4	43	0.476225	1.1075
				Tetrafluoroethylene polymer	9002-84-0	13	0.143975	
				Glass fiber	65997-17-3	40	0.443	
				Silicon	7440-21-3	2	0.02215	
				Carbon black	1333-86-4	2	0.02215	

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4	Contact spring	Palmet	0.0180	Copper	7440-50-8	16	0.013408	0.0838
				Nickel	7440-02-0	1	0.000838	
				Palladium	7440-05-3	1	0.000838	
				Platinum	7440-06-4	44	0.036872	
				Silver	7440-22-4	38	0.031844	
5	Housing	PBT	2.8920	Polybutylene terephthalate	30965-26-5	54	7.26678	13.4570
				Glass fiber	65997-17-3	30	4.0371	
				Brominated flame retardant (TBBPA Polycarbonate polymer)	Trade secret	11	1.48027	
				Antimony trioxide	1309-64-4	4	0.53828	
				Carbon black	1333-86-4	1	0.13457	
6	Mandrel Wire	Copper	2.2600	Copper	7440-50-8	100	10.5164	10.5164
		Coating	0.0001	Polyamide	63428-83-1	100	0.0005	0.0005
7	Resistive Wire	Metal	0.4458	Nickel	7440-02-0	45	0.93348	2.0744
				Copper	7440-50-8	55	1.14092	
8	Resistive Ink	Thick film ink	0.0030	Phenolic Resin	9039-25-2	67	0.00938	0.0140
				DAIP Resin	1087-21-4	6	0.00084	
				Carbon black	1333-86-4	7	0.00098	
				Barium sulfate	7727-43-7	16	0.00224	
				Graphite	7782-42-5	4	0.00056	
9	Element Epoxy	Epoxy	0.0005	Epoxy resin	25068-38-6	64	0.001472	0.0023
				Antimony trioxide	1309-64-4	11	0.000253	
				Aluminum oxide	1344-28-1	10	0.00023	
				Kaolin clay	1332-58-7	6	0.000138	
				Magnesium alumino silicate	1302-88-1	9	0.000207	
10	Terminal Cover	PPS	0.2220	Polyphenylene sulfide	26125-40-6	57	0.58881	1.0330
				Glass fiber	65997-17-3	41	0.42353	
				Carbon black	1333-86-4	2	0.02066	
11	T.R. Terminal x 2	Nickel Silver	0.0820	Copper	7440-50-8	65	0.24804	0.3816
				Zinc	7440-66-6	17	0.064872	
				Nickel	7440-02-0	18	0.068688	

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		Solder Inlay	0.0001	Silver	7440-22-4	56	0.000112	0.0002
				Copper	7440-50-8	22	0.000044	
				Zinc	7440-66-6	17	0.000034	
				Tin	7440-31-5	5	0.00001	
		Plating	0.0004	Gold	7440-57-5	100	0.0017	0.0017
12	Element, Terminal and Collector Bar Lube	Lube	0.0050	Decanoic acid, mixed esters with heptanoic acid, octanoic acid	68130-53-0	54.4	0.0126752	0.0233
				Lithium 12-hydroxystearate	7620-77-1	5.7	0.0013281	
				Isohexadecyl-isoctadecanoate	52006-45-8	33.7	0.0078521	
				Polyisobutylene	9003-27-4	6.2	0.0014446	
13	Tab	Nickel	0.1924	Nickel	7440-02-0	100	0.8955	0.8955
		Inlay	0.0176	Silver	7440-22-4	56	0.045808	0.0818
				Copper	7440-50-8	22	0.017996	
				Zinc	7440-66-6	17	0.013906	
				Tin	7440-31-5	5	0.00409	
14	Rotor	Nylon	1.3720	Polyamide 66 + Polyamide 6	32131-17-2 25038-54-4	43	2.745249	6.3843
				Tetrafluoroethylene polymer	9002-84-0	13	0.829959	
				Glass fiber	65997-17-3	40	2.55372	
				Silicon	7440-21-3	2	0.127686	
				Carbon black	1333-86-4	2	0.127686	
15	Shaft	Stainless steel	2.2300	Carbon	7440-44-0	0.15	0.0155652	10.3768
				Manganese	7439-96-5	2.00	0.207536	
				Silicon	7440-21-3	1.00	0.103768	
				Chromium	7440-47-3	18.00	1.867824	
				Nickel	7440-02-0	9.00	0.933912	
				Iron	7439-89-6	69.85	7.2481948	
16	Washer x 2	Stainless Steel	0.1000	Carbon	7440-44-0	0.15	0.00069795	0.4653
				Manganese	7439-96-5	2	0.009306	
				Silicon	7440-21-3	1	0.004653	
				Chromium	7440-47-3	18	0.083754	
				Nickel	7440-02-0	9	0.041877	
				Iron	7439-89-6	69.85	0.32501205	

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17	C-Ring	Stainless Steel	0.0180	Carbon	7440-44-0	0.15	0.0001257	0.0838
				Manganese	7439-96-5	1	0.000838	
				Silicon	7440-21-3	1	0.000838	
				Chromium	7440-47-3	13	0.010894	
				Iron	7439-89-6	84.85	0.0711043	
18	Front Lid	PBT	0.8270	Polybutylene terephthalate	30965-26-5	54	2.078028	3.8482
				Glass fiber	65997-17-3	30	1.15446	
				Brominated flame retardant (TBBPA Polycarbonate polymer)	Trade secret	11	0.423302	
				Antimony trioxide	1309-64-4	4	0.153928	
				Carbon black	1333-86-4	1	0.038482	
19	Bushing	Brass	3.3090	Copper	7440-50-8	61.5	9.469524	15.3976
				Zinc	7440-66-6	35.5	5.466148	
				Lead	7439-92-1	3	0.461928	
20	Bushing Lube	Lube	0.0050	Siloxanes and silicones, di-Me, di-Ph	68083-14-7	68.9	0.0160537	0.0233
				Lithium Stearate	4485-12-5	25.4	0.0059182	
				Silane, dichlorodimethyl, reaction products with silica	68611-44-9	4.8	0.0011184	
				Diphenylamine	122-39-4	0.9	0.0002097	
21	Collector Bar	Nickel Silver	0.0740	Nickel	7440-02-0	18	0.061974	0.3443
				Copper	7440-50-8	55	0.189365	
				Zinc	7440-66-6	27	0.092961	
		Plating	0.0009	Gold	7440-57-5	100	0.0042	0.0042
22	Bearing Ball X 2	Stainless steel	0.5880	Carbon	7440-44-0	1.00	0.027361	2.7361
				Silicon	7440-21-3	1.00	0.027361	
				Manganese	7439-96-5	1.00	0.027361	
				Phosphorus	7723-14-0	0.04	0.00109444	
				Sulfur	7704-34-9	0.03	0.00082083	
				Chromium	7440-47-3	17.00	0.465137	
				Nickel	7440-02-0	0.60	0.0164166	
				Molybdenum	7439-98-7	0.75	0.02052075	
Iron	7439-89-6	78.58	2.15002738					

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23	Insert	Aluminum	0.8500	Copper	7440-50-8	5.50	0.2175415	3.9553
				Bismuth	7440-69-9	0.40	0.0158212	
				Lead	7439-92-1	0.40	0.0158212	
				Aluminum	7429-90-5	93.70	3.7061161	
24	Lid Servo	Aluminum	4.2060	Copper	7440-50-8	5.50	1.076438	19.5716
				Bismuth	7440-69-9	0.40	0.0782864	
				Lead	7439-92-1	0.40	0.0782864	
				Aluminum	7429-90-5	93.70	18.3385892	
		Total weight	21.4904					

This Document was updated on: March 6, 2014

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. Please see RoHS Certificate of Compliance for exemptions used.
3. Per [Product Update Memo SC2436](#), this MDS is under revision. The updated version will be posted soon.