


MATERIAL DECLARATION SHEET



Material Number	PEL12D			
Product Line	ENCODER			
Compliance Date	2010/12/27			
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	Shaft	PC	0.537	Polycarbonate	25037-45-0	100	18.52	18.52
2	Contact Holder	POM	0.194	Polyoxymethylene	30846-29-8	100	6.69	6.69
3	Slide Contact	t0.12 Phosphor Bronze Ag Plating (0.5~1um)	0.026	Tin	7440-31-5	8	0.072	0.90
				Phosphorus	7723-14-0	0.2	0.002	
				Copper	7440-50-8	91.8	0.823	
				Silver	7440-22-4	100	0.003	
4	Leaf Spring	t0.2 Phosphor Bronze	0.124	Tin	7440-31-5	8	0.342	4.28
				Phosphorus	7723-14-0	0.2	0.008	
				Copper	7439-92-1	91.8	3.925	
5	Insulation Case	PBT	0.290	Polybutylene Terephthalate	26062-94-2	70	7.0	10.00
				Glass Fiber	65997-17-3	28	2.8	
				Additives	Trade secret	2	0.2	

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6	Terminal	t0.15 Nickel Silver	0.100	Copper	7440-50-8	54.787	1.889	3.45
				Nickel	7440-02-0	17.570	0.606	
				Zinc	7440-66-6	27.260	0.94	
				Lead	7439-92-1	0.001	0.00003	
				Tin	7440-31-5	0.002	0.00007	
				Iron	7439-89-6	0.028	0.00096	
				Manganese	7439-96-5	0.350	0.01207	
				Silicon	14464-46-1	0.002	0.00007	
		Ag Plating (0.5~1um)					Silver	
7	LED Driving Holder Cover	PBT	0.045	Polybutylene Terephthalate	26062-94-2	70	1.1	1.55
				Glass Fiber	65997-17-3	28	0.4	
				Additives, not to declare	Trade secret	2	0.0	
8	LED Driving Holder	PBT	0.051	Polybutylene Terephthalate	26062-94-2	70	1.2	1.76
				Glass Fiber	65997-17-3	28	0.5	
				Additives, not to declare	Trade secret	2	0.0	
9	LED Driving Holder Terminal	t0.1 Phosphor Bronze	0.020	Tin	7440-31-5	8	0.055	0.69
				Phosphorus	7803-51-2	0.2	0.001	
				Copper	7439-92-1	91.8	0.633	
		Ag Plating (0.5~1um)					Silver	

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10	Light Emission Diode	Au wire	0.012	Gold	7440-57-5	<1	<0.004	0.41		
		Ag paste		Silver	7440-22-4	<1	<0.004			
		Chip		Epoxy	25068-38-6	<1	<0.004			
				Indium	7440-74-6					
				Gallium	7440-55-3					
				Aluminum	7429-90-5					
		Epoxy		Phosphorus	7723-14-0	Epoxy	25068-38-6		39	0.161
		PCB		Copper	7440-50-8	60	0.248			
				Nickel	7440-02-0					
				Gold	7440-57-5					
11	Switch Contact	t0.08 Titanium with copper	0.018	Copper	7440-50-8	96.6	0.6	0.62		
				Titanium	7440-32-6	3.4	0.0			
		Ag Plating (0.5~1um)		Silver	7440-22-4	100	0.6			
12	SW Insulation Case	PBT	0.364	Polybutylene Terephthalate	26062-94-2	70	8.8	12.55		
				Glass Fiber	65997-17-3	28	3.5			
				Additives, not to declare	Trade secret	2	0.3			
13	SW Terminal	t0.25 Brass	0.180	Copper	7440-50-8	65.685	4.077	6.21		
				Iron	7439-89-6	0.035	0.0022			
				Lead	7439-92-1	0.002	0.0001			
				Zinc	7440-66-6	34.278	2.1276			
		Ag Plating (0.5~1um)		Silver	7440-22-4	100				

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14	Attaching Plate	t0.4 Steel	0.939	Carbon	7440-44-0	0.050	0.0162	32.38
				Manganese	7439-96-5	0.240	0.0777	
				Phosphorus	7723-14-0	0.016	0.0052	
				Sulfur	7704-34-9	0.012	0.0039	
				Silicon	14464-46-1	0.010	0.0032	
				Aluminum	7429-90-5	0.045	0.0145	
				Iron	7439-89-6	99.627	32.258	
		Sn Plating (5~8um)						
		Total weight (g)	2.9					

This Document was updated on: May 5, 2020

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.