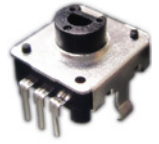


MATERIAL DATA SHEET



Material #	PES12			
Product Line	ENCODER			
Compliance Date	2008-06-23			
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	0.21	Polycarbonate	25037-45-0	100	15.0	15.0
2	Slide contact	t0.12 Phosphor Bronze with Ag Plating	0.026	Tin	7440-31-5	8.0	0.1488	1.86
				Phosphorus	7723-14-0	0.04	0.0007	
				Copper	7440-50-8	91.96	1.7104	
				Silver	7440-22-4	100	(Ag Plating 0.5~1um)	
				Additives, not to declare				
3	Insulating Case	PBT	0.29	Polybutylene Terephthalate	26062-94-2	70	14.497	20.71
				Glass Fiber	65997-17-3	28	5.8	
				Additives, not to declare		2	0.414	
4	Insulating Case Terminal	t0.15 Nickel Silver Ag Plating	0.1	Copper	7440-50-8	54.786	3.912	7.14
				Nickel	7440-02-0	17.570	12.54	
				Zinc	7440-66-6	27.260	1.946	
				Lead	7439-92-1	0.001	0.0001	
				Tin	7440-31-5	0.002	0.0001	
				Iron	7439-89-61	0.028	0.002	
				Manganese	7439-96-5	0.350	0.025	
				Silicon	7440-21-3	0.002	0.0001	

MATERIAL DATA SHEET



				Silver	7440-22-4	100	(Ag Plating 0.5~1um)	
				Additives, not to declare				
5	Leaf Spring	t0.2 Phosphor Bronze	0.124	Tin	7440-31-5	8.0	0.7088	8.86
				Phosphorus	7734-14-0	0.04	0.0035	
				Copper	7440-50-8	91.96	8.1468	
4	Attaching Plate	t0.4 Steel Tin Plating	0.65	Carbon	7440-44-0	0.050	0.023	46.63
				Manganese	7439-96-5	0.240	0.112	
				Phosphorus	7723-14-0	0.016	0.007	
				Sulfur	7704-34-9	0.012	0.006	
				Silicon	7440-21-3	0.010	0.005	
				Aluminum	7429-90-5	0.045	0.021	
				Iron	7439-89-6	99.627	46.456	
				Tin	7440-31-5	100	(Ag Plating 5~8um)	
				Additives, not to declare				
		Total weight	1.4					

Updated: May 5, 2020

Important remarks:

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