


# MATERIAL DECLARATION SHEET



Material Number	<b>2520 series</b>			
Product Line	<b>SPD</b>			
Compliance Date	<b>June 2023</b>			
RoHS Compliant	<b>Yes</b>	MSL	<b>1</b>	

NO	Construction Element (subpart)	Homogeneous Materials	Material weight [g]	Homogeneous Material	CASRN	Materials Mass %	Material Mass % of total unit wt.	Subpart mass of total wt · (%)
				Substances	if applicable			
1	Circuit board	Continuous Filament Fiber Glass	2.52	Continuous Filament Fiber Glass	65997-17-3	100.00%	3.42%	8.56%
		Copper	1.26	Copper	7440-50-8	100.00%	1.71%	
		Epoxy Resin	2.52	Epoxy resin	26265-08-7	100.00%	3.42%	
2	GDT	Metallized porcelain tube	3.7875	Alumina	1302-74-5	99.94%	5.14%	5.16%
				Silicon Dioxide	14464-46-1	0.02%	0.00%	
				Calcium oxide	1305-78-8	0.04%	0.00%	
				Molybdenum	7439-98-7	60.00%	0.00%	
		Tin layer	0.0034	Manganese	7439-96-5	20.00%	0.00%	
				Nickel	7440-02-0	20.00%	0.00%	
		AgCu28	0.0065	Silver	7440-22-4	72.00%	0.01%	
				Copper	7440-50-8	28.00%	0.00%	
Iron Nickel Alloy	0.0027	Iron	7439-89-6	58.00%	0.00%			
		Nickle	7440-02-0	42.00%	0.00%			
3	Plastic shell	PBT	26.5	Polybutylene terephthalate	26062-94-2	60.00%	21.60%	35.99%
				Halogen flame retardant	68928-70-1	12.00%	4.32%	
				Antimony trioxide	1309-64-4	5.00%	1.80%	
				Calcium sodium phosphate	65997-17-3	18.00%	6.48%	
				Others	Misc Not to declare	5.00%	1.80%	
4	Lead-free solder wire	Sn	10	Tin	7440-31-5	99.30%	13.49%	13.58%
				Copper	7440-50-8	0.70%	0.10%	
5	Copper strip	Copper strip	26	Copper	7440-50-8	61.17%	21.60%	35.32%
				Zinc	7440-66-6	38.56%	13.62%	
				Phosphorus	7723-14-0	0.00%	0.00%	
				Lead	7439-92-1	0.01%	0.00%	

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				Iron	7439-89-6	0.06%	0.02%	
				Other	Misc Not to declare	0.21%	0.07%	
6	Resistance	Ceramic rod	0.43	Aluminum Oxide	1344-28-1	72.84%	0.43%	1.00%
				Silicon Dioxide	14464-46-1	19.96%	0.12%	
				Calcium oxide	1305-78-8	1.55%	0.01%	
				Barium oxide	1304-28-5	5.63%	0.03%	
				Titanium Dioxide	13463-67-7	0.02%	0.00%	
		Around the wire	0.03	Nickle	7440-02-0	41.00%	0.02%	
				Copper	7440-50-8	57.00%	0.02%	
				Manganese	7439-96-5	2.00%	0.00%	
		Cap	0.04	Iron	7439-89-6	99.90%	0.05%	
				Copper	7440-50-8	0.08%	0.00%	
				Tin	7440-31-5	0.02%	0.00%	
		lead pin	0.152	Copper	7440-50-8	96.00%	0.20%	
				Tin	7440-31-5	4.00%	0.01%	
		Resistance paint	0.07	Silicon Dioxide	60676-86-0	70.00%	0.07%	
				Epoxy resine	25085-99-8	15.00%	0.01%	
				Black Ferric Oxide	1317-61-9	5.00%	0.00%	
				iron hydroxide oxide	20344-49-4	5.00%	0.00%	
				Titanium dioxide	13463-67-7	5.00%	0.00%	
		Color ring	0.016	Diglycidyl bisphenol a resin	25085-99-8	50.00%	0.01%	
				Carbon	1333-86-4	20.00%	0.00%	
Amino rosin	9003-8-1			15.00%	0.00%			
Isophorone	78-59-1			15.00%	0.00%			
7	Diode	Lead Frame	0.0928	Copper	7440-50-8	99.81%	0.13%	0.39%
				Iron	7439-89-6	0.15%	0.00%	
				Phosphorus	7723-14-0	0.04%	0.00%	
		Chip	0.0127	Silicon	7440-21-3	85.72%	0.01%	
				Nickle	7440-02-0	0.68%	0.00%	
				Lead	7439-92-1	7.39%	0.00%	
				Silicon Dioxide	7631-86-9	4.51%	0.00%	
				Aluminum Oxide	1344-28-1	1.70%	0.00%	
		Solder	0.014	Lead	7439-92-1	92.06%	0.02%	
				Tin	7440-31-5	5.26%	0.00%	
				Silver	7440-22-4	2.68%	0.00%	
		Molding compound	0.1625	Silicon Dioxide	7631-86-9	34.50%	0.08%	
				Quartz	14808-60-7	54.20%	0.12%	

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			Firebrake(R) ZB	138265-88-0	4.00%	0.01%
			Phenol formaldehyde resin	9003-35-4	7.20%	0.02%
			Carbon Black	1333-86-4	0.10%	0.00%
		Plating	Tin	7440-31-5	100.00%	0.00%
		<b>Total</b>				
				<b>73.623</b>		

**This Document was updated: June 2023**

**Important remarks:**

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