


# MATERIAL DECLARATION SHEET

Material Number	PWR163S-25-XXX			
Product Line	Power Resistor			
Compliance Date	July,5 2017			
RoHS Compliant	Yes	MSL	N/A	

## PWR163S-25-XXX

No.	Construction Element (Subpart)	Homogeneous Material	Material Weight (g)	Homogeneous Material	CASRN	Material Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
				Substance				
1	Housing	Epoxy Molding Compound	0.15	Silica	60676-86-0	69	15.0	21.752
				Epoxy resin	29690-82-2	15	3.3	
				Phenolic resin	9003-35-4	10	2.2	
				Antimony trioxide	1309-64-4	3	0.7	
				Brominated epoxy resin	68541-56-0	2	0.4	
				Carbon Black	1333-86-4	1	0.2	
2	Back Plate	Copper	0.32	Copper	7440-50-8	99.999	46.404	46.404
				Oxygen	7782-44-7	0.001	0.0005	
		Plating	0.002	Nickel	7440-02-0	100	0.29	0.290
3	Terminals	Copper	0.110	Copper	7440-50-8	99.999	15.951	15.952
				Oxygen	7782-44-7	0.001	0.00016	
		Plating	0.007	Tin	7440-31-5	100	1.015	1.015
4	Solder Paste	Solder	0.020	Tin	7440-31-5	84	2.4362	2.900
				Rosin	8050-09-7	5	0.1450	
				Silver	7440-22-4	10	0.2900	

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5	Substrate	Alumina	0.078	Copper	7440-50-8	1	0.0290	11.311
				Aluminum oxide	1344-28-1	88	9.9537	
				Manganese dioxide	1313-13-9	3.5	0.3959	
				Titanium-dioxide	13463-67-7	3.5	0.3959	
				Chromium(III)oxide	1308-38-9	2.5	0.2828	
Quartz (Silicon dioxide)	14808-60-7	2.5	0.2828					
6	Term Ink	Ink	0.002	Silver	7440-22-4	96	0.2784	0.290
				Lead	7439-92-1	1	0.0029	
				Bismuth	7440-69-9	1	0.0029	
				Platinum	7440-06-4	1	0.0029	
				Confidential Substances without declarable substances	Trade Secret	1	0.0029	
7	Resistive Ink	Ink	0.0005	Palladium	7440-05-3	33	0.0239	0.073
				Boron	7440-42-8	10	0.0073	
				Aluminum	7429-90-5	10	0.0073	
				Silicon	7440-21-3	10	0.0073	
				Lead	7439-92-1	10	0.0073	
				Silver	7440-22-4	20	0.0145	
				Ruthenium dioxide	12036-10-1	1.5	0.0011	
				Manganese	7439-96-5	1.5	0.0011	
				Alumina	1344-28-1	4	0.0029	
8	Encapsulant Glaze Ink	Ink	0.0001	Lead	7439-92-1	56.63	0.0074	0.013
				Silicon	7440-21-3	27.89	0.0036	
				Boron	7440-42-8	9.15	0.0012	
				Chromium(III)	7440-47-3	3.15	0.0004	
				Confidential Substances without declarable substances	Trade Secret	3.15	0.0004	

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Total Weight	0.69
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**This Document was updated on: 7/10/2019**

**Important remarks:**

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