


MATERIAL DECLARATION SHEET



Material Number	MSR			
Product Line	Fixed Resistor			
Compliance Date	10/10/2024			
RoHS Compliant		MSL	1	

Reference P/N: MSR3-0R01F1 (Under 0.02 Ohm)

No.	Construction Element (Subpart)	Homogeneous Material	Material Weight (g)	Homogeneous Material Substance	CASRN	Material Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Terminal	Copper C102	0.3900	Copper (Cu)	7440-50-8	99.9990%	45.9468%	45.9472%
				Oxygen (O)	7782-44-7	0.0010%	0.0005%	
		Tin Plating	0.0100	Tin (Sn)	7440-31-5	100.0000%	1.1781%	1.1781%
2	Resistive Element	Cuprothal	0.4488	Nickel (Ni)	7440-02-0	44.0000%	23.2648%	52.8746%
				Iron (Fe)	7439-89-6	0.5000%	0.2644%	
				Manganese (Mn)	7439-96-5	1.0000%	0.5287%	
				Copper (Cu)	7440-50-8	54.5000%	28.8167%	
		Total Weight	0.8488					

Reference P/N: MSR3-0R05F1 (Over 0.02 Ohm)

No.	Construction Element (Subpart)	Homogeneous Material	Material Weight (g)	Homogeneous Material Substance	CASRN	Material Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Terminal	Copper C102	0.3900	Copper (Cu)	7440-50-8	99.9990%	66.1122%	66.1129%
				Oxygen (O)	7782-44-7	0.0010%	0.0007%	
		Tin Plating	0.0100	Tin (Sn)	7440-31-5	100.0000%	1.6952%	1.6952%
4	Resistive Element	EVNOM Alloy	0.1899	Nickel (Ni)	7440-02-0	74.4000%	23.9508%	32.1919%
				Chromium (Cr)	7440-47-3	20.0000%	6.4384%	
				Aluminum (Al)	7429-90-5	3.5000%	1.1267%	
				Silicon (Si)	7440-21-3	1.0000%	0.3219%	
				Iron (Fe)	7439-89-6	0.5000%	0.1610%	
				Manganese (Mn)	7439-96-5	0.5000%	0.1610%	
				Copper (Cu)	7440-50-8	0.1000%	0.0322%	
		Total Weight	0.5899					

This Document was updated on: 10/10/2024

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. Resistive material weight will be different based on the resistance value.
3. The weight of the core and coating material will differ based on the size.