MATERIAL DECLARATION SHEET

BOURNS®

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

Reference P/N: UT5-1RB1 (Under 40 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	Ceramic Core	Ceramic	2.0400	Silicon Dioxide (SiO2)	7631-86-9	14.5000%	10.2548%	70.7228%
				Magnesium (Mg)	7439-95-4	1.1300%	0.7992%	
				Aluminum (Al)	7429-90-5	83.3200%	58.9263%	
				Barium (Ba)	7440-39-3	1.0500%	0.7426%	
2	Ceramic Cap	Iron	0.1500	Iron (Fe)	7439-89-6	99.9000%	5.1950%	5.2002%
				Tin (Sn)	7440-31-5	0.1000%	0.0052%	
3	Terminal	Copper C10100	0.233994	Copper (Cu)	7440-50-8	99.9954%	8.1117%	8.1121%
				Trace not to declare		0.0046%	0.0004%	
		Tin Plating	0.006006	Tin (Sn)	7440-31-5	100.0000%	0.2082%	0.2082%
4	Resistive Element	Cuprothal	0.3997	Nickel (Ni)	7440-02-0	44.0000%	6.0970%	13.8568%
				Iron (Fe)	7439-89-6	0.5000%	0.0693%	
				Manganese (Mn)	7439-96-5	1.0000%	0.1386%	
				Copper (Cu)	7440-50-8	54.5000%	7.5520%	
5	Silicon coat	Silicon	0.0548	Silica, amorphous	112926-00-8	31.2000%	0.5927%	1.8998%
				Silica, crystalline - Tripoli	1317-95-9	25.0000%	0.4750%	
				Kaolin	1332-58-7	12.9000%	0.2451%	
				Carbon black	1333-86-4	0.6000%	0.0114%	
				Mica	12001-26-2	12.9000%	0.2451%	
				Trimethoxy(methyl)silane	1185-55-3	17.4000%	0.3306%	
		Total Weight	2.8845					

MATERIAL DECLARATION SHEET

BOURNS®

Reference P/N: UT5-4K5H1 (Over 40 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	Ceramic Core	Ceramic	2.0400	Silicon Dioxide (SiO2)	7631-86-9	14.5000%	11.7246%	80.8593%
				Magnesium (Mg)	7439-95-4	1.1300%	0.9137%	
				Aluminum (Al)	7429-90-5	83.3200%	67.3720%	
				Barium (Ba)	7440-39-3	1.0500%	0.8490%	
2	Ceramic Cap	Iron	0.1500	Iron (Fe)	7439-89-6	99.9000%	5.9396%	5.9455%
				Tin (Sn)	7440-31-5	0.1000%	0.0059%	
3	Terminal	Copper C10100	0.233994	Copper (Cu)	7440-50-8	99.9954%	9.2744%	9.2748%
				Trace not to declare		0.0046%	0.0004%	
		Tin Plating	0.006006	Tin (Sn)	7440-31-5	100.0000%	0.2381%	0.2381%
4	Resistive Element	EVNOM Alloy	0.0381	Nickel (Ni)	7440-02-0	74.4000%	1.1236%	1.5102%
				Chromium (Cr)	7440-47-3	20.0000%	0.3020%	
				Aluminum (Al)	7429-90-5	3.5000%	0.0529%	
				Silicon (Si)	7440-21-3	1.0000%	0.0151%	
				Iron (Fe)	7439-89-6	0.5000%	0.0076%	
				Manganese (Mn)	7439-96-5	0.5000%	0.0076%	
				Copper (Cu)	7440-50-8	0.1000%	0.0015%	
5	Silicon coat	Silicon	0.0548	Silica, amorphous	112926-00-8	31.2000%	0.6777%	2.1721%
				Silica, crystalline - Tripoli	1317-95-9	25.0000%	0.5430%	
				Kaolin	1332-58-7	12.9000%	0.2802%	
				Carbon black	1333-86-4	0.6000%	0.0130%	
				Mica	12001-26-2	12.9000%	0.2802%	
				Trimethoxy(methyl)silane	1185-55-3	17.4000%	0.3779%	
		Total Weight	2.5229					

This Document was updated on: 10/16/2024

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.