



Material Declaration Data Sheet

RSPF14 (Formerly RSPF 1/4)

Flameproof Power Resistor



Date: **November 9, 2012** Max Temp: **260°C** (Contact factory for detailed soldering recommendations.)
 Component Weight (g): **0.0192**

BOM Item	Material	CAS Number	Material Weight (g)	Material PPM of Component	Material % of BOM Item	BOM Item Weight (g)	BOM Item % of Component
Ceramic core	aluminum oxide	1344-28-1	0.0065	337,152	96.00%	0.0067	35.12%
	silicon oxide	7631-86-9	0.0001	7,024	2.00%		
	magnesium oxide	1309-48-4	0.0001	3,512	1.00%		
	calcium oxide	1305-78-8	0.0001	3,512	1.00%		
Resistive element	tin-dioxide	18282-10-5	0.00001	400	100.00%	0.00001	0.04%
Cap and lead assembly	iron	7439-89-6	0.0037	193,466	34.93%	0.0106	55.38%
	copper	7440-50-8	0.0058	304,598	55.00%		
	tin	7440-31-5	0.0011	55,736	10.06%		
Over-coat / marking	silicone resin	9016-00-6	0.0016	82,178	86.87%	0.0018	9.46%
	silicone dioxide	14808-60-7	0.0001	6,999	7.40%		
	xylene	1330-20-7	0.00001	508	0.54%		
	aromatic solvent	64742-94-5	0.0001	4,915	5.20%		
Total Weight			0.0192				

* Weights are approximate.



Material Declaration Data Sheet

RSPF12 (Formerly RSPF 1/2)

Flameproof Power Resistor



Date: **November 9, 2012** Max Temp: **260°C** (Contact factory for detailed soldering recommendations.)
 Component Weight (g): **0.0383**

BOM Item	Material	CAS Number	Material Weight (g)	Material PPM of Component	Material % of BOM Item	BOM Item Weight (g)	BOM Item % of Component
Ceramic core	aluminum oxide	1344-28-1	0.0129	337,152	96.00%	0.0135	35.12%
	silicon oxide	7631-86-9	0.0003	7,024	2.00%		
	magnesium oxide	1309-48-4	0.0001	3,512	1.00%		
	calcium oxide	1305-78-8	0.0001	3,512	1.00%		
Resistive element	tin-dioxide	18282-10-5	0.00002	400	100.00%	0.00002	0.04%
Cap and lead assembly	iron	7439-89-6	0.0074	193,466	34.93%	0.0212	55.38%
	copper	7440-50-8	0.0117	304,598	55.00%		
	tin	7440-31-5	0.0021	55,736	10.06%		
Over-coat / marking	silicone resin	9016-00-6	0.0031	82,178	86.87%	0.0036	9.46%
	silicone dioxide	14808-60-7	0.0003	6,999	7.40%		
	xylene	1330-20-7	0.00002	508	0.54%		
	aromatic solvent	64742-94-5	0.0002	4,915	5.20%		
Total Weight			0.0383				

* Weights are approximate.



Material Declaration Data Sheet

RSPF1 (Formerly RSPF 1)

Flameproof Power Resistor

Date: **November 9, 2012**

Max Temp: **260°C** (Contact factory for detailed soldering recommendations.)

Component Weight (g): **0.2268**

BOM Item	Material	CAS Number	Material Weight (g)	Material PPM of Component	Material % of BOM Item	BOM Item Weight (g)	BOM Item % of Component
Ceramic core	aluminum oxide	1344-28-1	0.0765	337,152	96.00%	0.0797	35.12%
	silicon oxide	7631-86-9	0.0016	7,024	2.00%		
	magnesium oxide	1309-48-4	0.0008	3,512	1.00%		
	calcium oxide	1305-78-8	0.0008	3,512	1.00%		
Resistive element	tin-dioxide	18282-10-5	0.0001	400	100.00%	0.0001	0.04%
Cap and lead assembly	iron	7439-89-6	0.0439	193,466	34.93%	0.1256	55.38%
	copper	7440-50-8	0.0691	304,598	55.00%		
	tin	7440-31-5	0.0126	55,736	10.06%		
Over-coat / marking	silicone resin	9016-00-6	0.0186	82,178	86.87%	0.0215	9.46%
	silicone dioxide	14808-60-7	0.0016	6,999	7.40%		
	xylene	1330-20-7	0.0001	508	0.54%		
	aromatic solvent	64742-94-5	0.0011	4,915	5.20%		
Total Weight			0.2268				

* Weights are approximate.



Material Declaration Data Sheet

RSPF2 (Formerly RSPF 2)

Flameproof Power Resistor

Date: **November 9, 2012**

Max Temp: **260°C** (Contact factory for detailed soldering recommendations.)

Component Weight (g): **0.5903**

BOM Item	Material	CAS Number	Material Weight (g)	Material PPM of Component	Material % of BOM Item	BOM Item Weight (g)	BOM Item % of Component
Ceramic core	aluminum oxide	1344-28-1	0.1990	337,159	96.00%	0.2073	35.12%
	silicon oxide	7631-86-9	0.0041	7,024	2.00%		
	magnesium oxide	1309-48-4	0.0021	3,512	1.00%		
	calcium oxide	1305-78-8	0.0021	3,512	1.00%		
Resistive element	tin-dioxide	18282-10-5	0.0002	390	100.00%	0.0002	0.04%
Cap and lead assembly	iron	7439-89-6	0.1142	193,477	34.93%	0.3269	55.38%
	copper	7440-50-8	0.1798	304,617	55.00%		
	tin	7440-31-5	0.0329	55,739	10.06%		
Over-coat / marking	silicone resin	9016-00-6	0.0485	82,152	86.87%	0.0558	9.46%
	silicone dioxide	14808-60-7	0.0041	6,997	7.40%		
	xylene	1330-20-7	0.0003	508	0.54%		
	aromatic solvent	64742-94-5	0.0029	4,913	5.20%		
Total Weight			0.5903				

* Weights are approximate.



Material Declaration Data Sheet

RSPF3 (Formerly RSPF 3)

Flameproof Power Resistor

Date: **November 9, 2012**

Max Temp: **260°C** (Contact factory for detailed soldering recommendations.)

Component Weight (g): **1.0489**

BOM Item	Material	CAS Number	Material Weight (g)	Material PPM of Component	Material % of BOM Item	BOM Item Weight (g)	BOM Item % of Component
Ceramic core	aluminum oxide	1344-28-1	0.3536	337,152	96.00%	0.3684	35.12%
	silicon oxide	7631-86-9	0.0074	7,024	2.00%		
	magnesium oxide	1309-48-4	0.0037	3,512	1.00%		
	calcium oxide	1305-78-8	0.0037	3,512	1.00%		
Resistive element	tin-dioxide	18282-10-5	0.0004	400	100.00%	0.0004	0.04%
Cap and lead assembly	iron	7439-89-6	0.2029	193,466	34.93%	0.5809	55.38%
	copper	7440-50-8	0.3195	304,598	55.00%		
	tin	7440-31-5	0.0585	55,736	10.06%		
Over-coat / marking	silicone resin	9016-00-6	0.0862	82,178	86.87%	0.0992	9.46%
	silicone dioxide	14808-60-7	0.0073	6,999	7.40%		
	xylene	1330-20-7	0.0005	508	0.54%		
	aromatic solvent	64742-94-5	0.0052	4,915	5.20%		
Total Weight			1.0489				

* Weights are approximate.