



# 100% Material Declaration Data Sheet for 7-Series FBG900 RoHS 6/6

PK818(v1.0) November 30, 2016

**Average Weight : 3.7958 g**

Component	Substance Description	CAS # or Description	% of component	Use in product	Component weight / substance weight ( in grams)	Component % of total
Silicon die 1					<b>0.388303</b>	<b>10.23%</b>
	Silicon	7440-21-3	100.00	basis	0.388303	
Bump					<b>0.015339</b>	<b>0.40%</b>
	Tin	7440-31-5	98.20	basis	0.015063	
	Silver	7440-22-4	1.80	basis	0.000276	
Underfill					<b>0.049000</b>	<b>1.29%</b>
	Bisphenol F type liquid epoxy	9003-36-5	15.00	basis	0.007350	
	1,6-Bis(2,3-epoxypropoxy)naphthalene	27610-48-6	10.00	basis	0.004900	
	Bisphenol A type liquid epoxy	25068-38-6	5.00	basis	0.002450	
	Amine type hardener	trade secret	10.00	basis	0.004900	
	Silicon dioxide	60676-86-0	58.00	filler	0.028420	
	Carbon black	1333-86-4	1.00	color agent	0.000490	
Additives	trade secret	1.00	additives	0.000490		
Solder paste					<b>0.004284</b>	<b>0.11%</b>
	Tin	7440-31-5	96.50	metal	0.004134	
	Silver	7440-22-4	3.00	metal	0.000129	
	Copper	7440-50-8	0.50	metal	0.000021	
Capacitor 1					<b>0.002400</b>	<b>0.06%</b>
	BaTiO3 type	1304-28-5	40.00	Ceramic	0.000960	
	Titanium dioxide	13463-67-7	20.00		0.000480	
	Misc	-	6.67		0.000160	
	Nickel	7440-02-0	2.42	Inner electrode	0.000058	
	Copper	7440-50-8	20.73	Out electrode	0.000498	
	Silicon dioxide	7631-86-9	1.85		0.000044	
	diboron trioxide; boric oxide	1303-86-2	0.45		0.000011	
	Nickel	7440-02-0	2.12	Plating1	0.000051	
	Tin	7440-31-5	5.76	Plating2	0.000138	
Capacitor3					<b>0.009200</b>	<b>0.24%</b>
	BaTiO3 type	1304-28-5	31.67	Ceramic	0.002914	
	Titanium dioxide	13463-67-7	15.83		0.001456	
	Misc	-	5.28		0.000486	
	Nickel	7440-02-0	26.67	Inner Electrode	0.002454	
	Copper	7440-50-8	15.10	Outer Electrode	0.001389	
	Silicon dioxide	7631-86-9	1.34		0.000123	
	diboron trioxide; boric oxide	1303-86-2	0.33		0.000030	
	Nickel	7440-02-0	1.00	Plating1	0.000092	
Tin	7440-31-5	2.78	Plating2	0.000256		
Capacitor4					<b>0.010800</b>	<b>0.28%</b>
	BaTiO3 type	1304-28-5	37.46	Ceramic	0.004046	
	Titanium dioxide	13463-67-7	18.73		0.002023	
	Misc	-	6.24		0.000674	
	Nickel	7440-02-0	17.95	Inner Electrode	0.001939	
	Copper	7440-50-8	15.88	Outer Electrode	0.001715	
	Silicon dioxide	7631-86-9	1.41		0.000152	
	diboron trioxide; boric oxide	1303-86-2	0.35		0.000038	
	Nickel	7440-02-0	0.54	Plating1	0.000058	
Tin	7440-31-5	1.44	Plating2	0.000156		
Solder ball					<b>0.751829</b>	<b>19.81%</b>
	Tin	7440-31-5	96.50	Main material	0.725515	
	Silver	7440-22-4	3.00	Main material	0.022555	
	Copper	7440-50-8	0.50	Main material	0.003759	
Substrate					<b>2.564645</b>	<b>67.57%</b>
	Copper	7440-50-8	36.75		0.942507	
	Tin	7440-31-5	1.11		0.028468	
	Silver	7440-22-4	0.03		0.000769	
	Core	N/A	48.35		1.240006	
	ABF	N/A	11.31		0.290061	
Solder Mask	N/A	2.45		0.062834		

## Revision History

Date	Version	Description of Revisions
11/30/2016	1.0	Initial Xilinx release.