



## MATERIAL DECLARATION DATA SHEET

Device Name	Package Type	Pkg Wt (g)			
A3P125	FGG144	0.5420			
Material Breakdown of Component	Material Breakdown (%)	Substance Name	CAS No.	Weight (g)	Substance Mass (%)
MOLD COMPOUND	42.97	Silica (Fused)	60676-86-0	0.2089	89.7
		Epoxy resin	Undisclosed	0.0128	5.5
		Phenol Resin	Undisclosed	0.0105	4.5
		Carbon Black	1333-86-4	0.0000	0.3
				<b>0.23291</b>	<b>100</b>
SUBSTRATE	32.01	Talc containing no asbestiform fibers	14807-96-6	0.0013	0.778
		Morpholine derivative	Trade secret	0.0013	0.778
		Barium Sulfate	7727-43-7	0.0078	4.512
		Silica,amorphous	7631-86-9	0.0003	0.156
		Dipropylene glycol monomethyl ether	34590-94-8	0.0027	1.556
		BIS(3-ETHYL-5-METHYL-4-MALEIMIDOPHENYL)METHANE	105391-33-1	0.0167	9.65
		Inorganic Filler	Trade secret	0.0100	5.79
		Continuous Filament Fiber Glass	65997-17-3	0.0167	9.65
		Copper(HL832NX-A)	7440-50-8	0.0234	13.51
		Cu	7440-50-8	0.0853	49.18
		Ni	7440-02-0	0.0068	3.93
Au	7440-57-5	0.0009	0.51		
				<b>0.1735</b>	<b>100</b>
DIE	1.40	Silicon (Si)	7440-21-3	0.0076	99.99
		trade secret	PROPRIETARY	0.0000	0.01
				<b>0.0076</b>	<b>100</b>
DIE ATTACH EPOXY	0.04	SILVER	7440-22-4	0.0002	76.5
		Epoxy resin A	9003-36-5	0.0133	11
		Epoxy resin B	Trade secret	0.0002	6
		t-Butylphenyl glycidyl ether	3101-60-8	0.0000	5
		Phenolic Hardener	Trade secret	0.0012	1
		Dicyandiamide	461-58-5	0.0000	0.5
				<b>0.0002</b>	<b>100</b>
SOLDER BALL	23.05	Tin	7440-31-5	0.1206	96.5
		Silver	7440-22-4	0.0037	3
		Copper	7440-50-8	0.0006	0.5
				<b>0.1249</b>	<b>100</b>
PCC wire	0.52	Cu	7440-50-8	0.0028	98.25
		Pd	7440-05-3	0.0000	1.75
				<b>0.0028</b>	<b>100</b>
				<b>0.5420</b>	

**Note: Microsemi believes this information to be correct, but cannot guarantee its completeness or accuracy as it is based on data received from sources outside our company.**

Revision No.	Date	Description of Change
0	5/10/2013	Initial release
1	12/5/2013	Correct typo in substance Name of Solder ball (remove "lead" and instead of it with "Copper")
2	12/18/2014	Change "CAS No." for "Inorganic Filler" in substrate from "21654-51-2" to "Trade secret"
3	7/15/2016	Correct "CAS No." for "Silver" in solder ball to "2440-22-4"