



Semiconductor Device Type: JMA 008 VDFN 3x3x0.9mm NiPdAu			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)			J-STD-609A Product Marking and/or Pkg. Labeling e4		
Basic Substance	CAS Number	Contained in Sub-Component	% Total Weight	mg/part	ppm	11.51	(mg) Total	Mold Compound	% of Total Weight	50.28	
Silica, fused	60676-86-0	Mold Compound	45.252	10.363	452.520			Silica, fused	60676-86-0	90.00	
Epoxy Resin	Trade Secret	Mold Compound	2.439	0.558	24.386			Epoxy Resin	Trade Secret	4.85	
Phenolic Resin	Trade Secret	Mold Compound	2.439	0.558	24.386			Phenolic Resin	Trade Secret	4.85	
Carbon Black	1333-86-4	Mold Compound	0.151	0.035	1.508			Carbon Black	1333-86-4	0.30	
Copper	7440-50-8	Lead Frame	40.132	9.190	401.315			<b>Total 100.00</b>			
Iron	7439-89-6	Lead Frame	0.060	0.014	603	9.21	(mg) Total	Lead Frame	% of Total Weight	40.22	
Phosphorous	7723-14-0	Lead Frame	0.016	0.004	161			Copper	7440-50-8	99.78	
Zinc (Metal)	7440-66-6	Lead Frame	0.012	0.003	121			Iron	7439-89-6	0.15	
Silver	7440-22-4	Die Attach	1.009	0.231	10,087			Phosphorous	7723-14-0	0.04	
Epoxy resin	68475-94-5	Die Attach	0.262	0.060	2,620			Zinc (Metal)	7440-66-6	0.03	
Copper(II) oxide	1317-38-0	Die Attach	0.039	0.009	393			<b>Total 100.00</b>			
Silicon	7440-21-3	Chip (Die)	5.890	1.349	58,900	0.30	(mg) Total	Die Attach	% of Total Weight	1.31	
Gold	7440-57-5	Wire Bond	0.490	0.112	4,900			Silver	7440-22-4	77.00	
Nickel	7440-02-0	Plating on external leads (pins)	1.666	0.381	16,657			Epoxy resin	68475-94-5	20.00	
Palladium	7440-05-3	Plating on external leads (pins)	0.138	0.032	1,377			Copper(II) oxide	1317-38-0	3.00	
Gold	7440-57-5	Plating on external leads (pins)	0.007	0.001	65			<b>Total 100.00</b>			
<b>TOTALS:</b>			<b>100.000</b>	<b>22.900</b>	<b>1,000,000</b>	1.35	Total (mg)	Chip (Die)	% of Total Weight	5.89	
<b>0.0229 g Total Mass</b>								Doped Silicon	7440-21-3	100.00	
This semiconductor device and its homogenous materials comply with EU Directives: 2002/95/EC (27 January 2003) & Directive 2011/65/EU (08 June 2011) and 2015/863/EU (31 March 2015) and 2002/53/EC (End-of-Life Vehicles (ELV) without exemption (zero))											
Compliance with the above EU Directives has been verified via internal design controls, supplier declarations, and /or analytical test data.											
If a chemical substance is absent from the list above, the chemical substance is NOT an intentional ingredient in the semiconductor device and, to the best of Microchip Technology Incorporated's knowledge and belief as of the date of this document, there is no credible reason to believe that the unavoidable impurity concentration of the chemical substance, if any, is not below the threshold of regulatory concern for any regulatory scheme world-wide.											
Molding compounds used by Microchip meet the UL94 V0 flammability standard for plastics. You can access the UL iQTM family of databases to obtain a test report at <a href="http://ul.com/global/eng/pages/offering/industries/chemicals/plastics/">http://ul.com/global/eng/pages/offering/industries/chemicals/plastics/</a>											
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Assembled package referenced above is EU REACH compliant based on the latest SVHC candidate list of ECHA which can be found at <a href="http://echa.europa.eu/web/guest/candidate-list-table">http://echa.europa.eu/web/guest/candidate-list-table</a>											
						22.90				100.00	