



Semiconductor Device Type: DB / DC (F6X) 003 SOT-223 Matte Tin			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)			JEDEC 97 Product Marking and/or Pkg. Labeling e3	
Basic Substance	CAS Number	Contained In Sub-Component	% Total Weight	mg/part	ppm	(mg) Total	Mold Compound	% of Total Weight		
Silica, vitreous	60676-86-0	Mold Compound	41.667	48.209	416.670	56.72			49.02	
Epoxy Resin (No bromine, No diantimony trioxide)	Trade Secret	Mold Compound	3.002	3.474	30.025		Silica, vitreous	60676-86-0	85.00	
Phenolic Resin (No Br / CL SbO3, No diantimony trioxide)	Trade Secret	Mold Compound	3.002	3.474	30.025		Epoxy Resin	Trade Secret	6.13	
Epoxy, Cresol Novolac	29690-82-2	Mold Compound	1.201	1.390	12.010		Phenolic Resin	Trade Secret	6.13	
Carbon Black	1333-86-4	Mold Compound	0.147	0.170	1,471		Epoxy, Cresol Novolac	29690-82-2	2.45	
Copper	7440-50-8	Lead Frame	44.941	51.997	449,408		Carbon Black	1333-86-4	0.30	
Iron	7439-89-6	Lead Frame	1.105	1.279	11,054		Total	100.00		
Silver	7440-22-4	Lead Frame	0.896	1.037	8,961	54.43			47.04	
Zinc	7440-66-6	Lead Frame	0.059	0.068	588		Copper	7440-50-8	95.54	
Phosphorous	7723-14-0	Lead Frame	0.039	0.045	388		Iron	7439-89-6	2.35	
Silver (Ag)	7440-22-4	Die Attach	0.502	0.581	5,024		Silver	7440-22-4	1.91	
Proprietary Resin	Trade Secret	Die Attach	0.118	0.137	1,184		Zinc	7440-66-6	0.13	
Proprietary Curing agent & Hardener	Trade Secret	Die Attach	0.019	0.022	192		Phosphorous	7723-14-0	0.08	
Silicon	7440-21-3	Chip (Die)	1.580	1.828	15,800	0.74		Total	100.00	
Gold	7440-57-5	Wire Bond	0.150	0.174	1,500		Silver (Ag)	7440-22-4	78.50	
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.570	1.816	15,700		Proprietary Resin	Trade Secret	18.50	
TOTALS:			100.000	115.700	1,000,000		Proprietary Curing agent & Hardener	Trade Secret	3.00	
0.1157 g Total Mass							Total	100.00	0.64	
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 http://ul.com/global/eng/pages/offering/industries/chemicals/plastics/										
The protective "tubes" in which the specific product is shipped are made from polyvinyl chloride (PVC) plastic. "Window envelopes" used to hold the packing slip on the outer box and certain "reels" may be made from PVC plastic.										
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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 http://echa.europa.eu/web/guest/candidate-list-table										
						1.83	Total (mg)	Chip (Die)	% of Total Weight	1.58
							Doped Silicon	7440-21-3	100.00	
							Total	100.00		
						0.17	(mg) Total	Wire Bond	% of Total Weight	0.15
							Doped Gold	7440-57-5	100.00	
							Total	100.00		
						1.82	(mg) Total	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	% of Total Weight	1.57
							Tin	7440-31-5	100.00	
							Total	100.00		
						115.700				100.000