



 MICROCHIP			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials				JEDEC 97 Product Marking and/or Pkg. Labeling e3	
Semiconductor Device Type: CH / OT / OTY (C8X) 006 SOT-23 Matte Tin											
Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	11.32	(mg) Total	Mold Compound	% of Total Weight	66.59	
Silica, vitreous	60676-86-0	Mold Compound	57.873	9.838	578,734		Silica, vitreous	60676-86-0	86.91		
Epoxy Resin	Trade Secret	Mold Compound	5.107	0.868	51,075		Epoxy Resin	Trade Secret	7.67		
Phenolic Resin	Trade Secret	Mold Compound	3.403	0.578	34,027		Phenolic Resin	Trade Secret	5.11		
Carbon Black	1333-86-4	Mold Compound	0.206	0.035	2,064		Carbon Black	1333-86-4	0.31		
Copper	7440-50-8	Lead Frame	25.738	4.375	257,378	Total100.00					
Iron	7439-89-6	Lead Frame	0.633	0.108	6,331	4.58	(mg) Total	Lead Frame	% of Total Weight	26.94	
Silver	7440-22-4	Lead Frame	0.513	0.087	5,132		Copper	7440-50-8	95.54		
Zinc	7440-66-6	Lead Frame	0.034	0.006	337		Iron	7439-89-6	2.35		
Phosphorous	7723-14-0	Lead Frame	0.022	0.004	222		Silver	7440-22-4	1.91		
Epoxy resin	Trade Secret	Die Attach	0.132	0.022	1,318		Zinc	7440-66-6	0.13		
Silicon dioxide	7631-86-9	Die Attach	0.038	0.007	383		Phosphorous	7723-14-0	0.08		
Silicon	7440-21-3	Chip (Die)	4.760	0.809	47,600	Total100.00					
Copper	7440-50-8	Wire Bond Copper palladium coated (CuPd)	0.305	0.052	3,046	0.03	(mg) Total	Die Attach	% of Total Weight	0.17	
Palladium	7440-05-3	Wire Bond Copper palladium coated (CuPd)	0.005	0.001	54		Epoxy resin	Trade Secret	77.50		
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.230	0.209	12,300		Silicon dioxide	7631-86-9	22.50		
TOTALS:			100.000	17.000	1,000,000	Total100.00					
0.0170 g Total Mass											
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/											
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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											
						0.81	Total (mg)	Chip (Die)	% of Total Weight	4.76	
							Doped Silicon	7440-21-3	100.00		
						Total100.00					
						0.05	(mg) Total	Wire Bond Copper palladium coated (CuPd)	% of Total Weight	0.31	
							Copper	7440-50-8	98.25		
							Palladium	7440-05-3	1.75		
						Total100.00					
						0.21	(mg) Total	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	% of Total Weight	1.23	
							Tin	7440-31-5	100.00		
						Total100.00					
						17.000					100.000