



 MICROCHIP			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				
Semiconductor Device Type: CT / OT / OTY (C7X) 005 SOT-23 Matte Tin													
Basic Substance		CAS Number	“Contained in” Sub-Component	% Total Weight	mg/part	ppm	12.77	(mg) Total	Mold Compound	% of Total Weight	79.8		
Silica, vitreous		60676-86-0	Mold Compound	69.354	11.097	693,542		Silica, vitreous	60676-86-0	86.91			
Epoxy Resin		Trade Secret	Mold Compound	6.121	0.979	61,207		Epoxy Resin	Trade Secret	7.67			
Phenolic Resin		Trade Secret	Mold Compound	4.078	0.652	40,778		Phenolic Resin	Trade Secret	5.11			
Carbon Black		1333-86-4	Mold Compound	0.247	0.040	2,474		Carbon Black	1333-86-4	0.31			
Copper		7440-50-8	Lead Frame	10.031	1.605	100,314		Total				100.00	
Iron		7439-89-6	Lead Frame	0.247	0.039	2,468	1.68	(mg) Total	Lead Frame	% of Total Weight	10.5		
Silver		7440-22-4	Lead Frame	0.200	0.032	2,000		Copper	7440-50-8	95.54			
Zinc		7440-66-6	Lead Frame	0.013	0.002	131		Iron	7439-89-6	2.35			
Phosphorous		7723-14-0	Lead Frame	0.009	0.001	87		Silver	7440-22-4	1.91			
Silver (Ag)		7440-22-4	Die Attach	0.563	0.090	5,625		Zinc	7440-66-6	0.13			
Modified Epoxy Resin		13561-08-5	Die Attach	0.105	0.017	1,050		Phosphorous	7723-14-0	0.08			
Diglycidylether of bisphenol-F		54208-63-8	Die Attach	0.056	0.009	563	Diglycidylether of bisphenol-F	Total			100.00		
Modified Amine		827-43-0	Die Attach	0.026	0.004	263		0.12	(mg) Total	Die Attach	% of Total Weight	0.75	
Silicon		7440-21-3	Chip (Die)	7.500	1.200	75,000			Silver (Ag)	7440-22-4	75.00		
Copper		7440-50-8	Wire Bond palladium coated copper (CuPd)	0.197	0.031	1,965			Modified Epoxy Resin	13561-08-5	14.00		
Palladium		7440-05-3	Wire Bond palladium coated copper (CuPd)	0.004	0.001	35			Modified Amine	827-43-0	3.50		
Tin		7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.250	0.200	12,500	Total			100.00			
TOTALS:						100.000	16.000	1,000,000	1.20	Total (mg)	Chip (Die)	% of Total Weight	7.5
0.0160 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/													
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													
							0.20	(mg) Total	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	% of Total Weight	1.25		
								Tin	7440-31-5	100.00			
								Total				100.00	
							16.000	100.000					