



 MICROCHIP			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials			JEDEC 97 Product Marking and/or Pkg. Labeling e3		
Semiconductor Device Type: P (D6X) 016 PDIP (Small Outline - .300in) Matte Tin											
Basic Substance		CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	887.93 (mg) Total		Mold Compound	% of Total Weight	79.8
Fused Silica		60676-86-0	Mold Compound	57.456	639.313	574.560	Fused Silica		60676-86-0	72.00	
Metal Hydro Oxide		Trade Secret	Mold Compound	8.778	97.673	87.780	Metal Hydro Oxide		Trade Secret	11.00	
Epoxy Resin		Trade Secret	Mold Compound	5.586	62.155	55.860	Epoxy Resin		Trade Secret	7.00	
Phenol Resin		Trade Secret	Mold Compound	5.586	62.155	55.860	Phenol Resin		Trade Secret	7.00	
SiO2		14808-60-7	Mold Compound	1.995	22.198	19.950	SiO2		14808-60-7	2.50	
Carbon Black		1333-86-4	Mold Compound	0.399	4.440	3.990	Carbon Black		1333-86-4	0.50	
Copper		7440-50-8	Lead Frame	10.031	111.620	100.314	Total		100.00		
Iron		7439-89-6	Lead Frame	0.247	2.746	2.468	116.83 (mg) Total		Lead Frame	% of Total Weight	10.5
Silver		7440-22-4	Lead Frame	0.200	2.226	2.000	Copper		7440-50-8	95.54	
Zinc		7440-66-6	Lead Frame	0.013	0.146	0.131	Iron		7439-89-6	2.35	
Phosphorous		7723-14-0	Lead Frame	0.009	0.096	87	Silver		7440-22-4	1.91	
Silver		7440-22-4	Die Attach	0.563	6.259	5.625	Zinc		7440-66-6	0.13	
Diester Resin		94-80-4	Die Attach	0.113	1.252	1.125	Phosphorous		7723-14-0	0.08	
Functionalized Urethane Resin		72869-86-4	Die Attach	0.038	0.417	375	Total		100.00		
Epoxy Resin		9003-36-5	Die Attach	0.019	0.209	188	8.35 (mg) Total		Die Attach	% of Total Weight	0.75
Epoxy Resin		13561-08-5	Die Attach	0.019	0.209	188	Silver		7440-22-4	75.00	
Silicon		7440-21-3	Chip (Die)	7.500	83.453	75.000	Diester Resin		94-80-4	15.00	
Copper		7440-50-8	Wire Bond Copper palladium coated (CuPd)	0.197	2.186	1.965	Functionalized Urethane Resin		72869-86-4	5.00	
Palladium		7440-05-3	Wire Bond Copper palladium coated (CuPd)	0.004	0.039	35	Epoxy Resin		9003-36-5	2.50	
Tin		7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.250	13.909	12.500	Epoxy Resin		13561-08-5	2.50	
TOTALS:				100.000	1,112.700	1,000,000	Total		100.00		
1.1127 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.											
Microchip Technology Incorporated believes the information in this form concerning substances restricted by RoHS in Microchip Technology Incorporated's semiconductor devices in their original packing materials is true and correct to the best of its knowledge and belief, as of the date listed in this form. Microchip Technology Incorporated cannot guarantee the completeness and accuracy of data in this form because it has been compiled based on the ranges provided in Material Safety Data Sheets provided by raw material suppliers. Supplier information is often protected from disclosure as trade secrets and some information may not have been provided by subcontract assemblers and raw material suppliers. Information is provided only as estimates of the average weight of these parts and the average weight of anticipated significant toxic metals components. These estimates do not include trace levels of dopants, metals, and non-metal materials contained within silicon devices (silicon IC) in the finished parts.											
Microchip Technology Incorporated does not provide any warranty, express or implied, with respect to the information provided in this declaration. The exclusive, limited product warranties provided by Microchip Technology Incorporated and its subsidiaries are contained in Microchip's standard terms and conditions of sale. These are provided in Microchip's quotations, sales order acknowledgement, and invoices.											
Microchip disclaims any duty to notify users of updates or changes to Material Content Declarations and shall not be liable for any damages, direct or indirect, consequential or otherwise, suffered by users or third parties as a result of the users' reliance on the information in Material Content Declarations (MCD) or independent third party test reports (SGS) or of this Certificate of Compliance for semiconductor products.											
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											
							Total		100.00		
							Total (mg)		100		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		
							Total		100.00		