



Semiconductor Device Type: H5A 006 VDFN 3.2x2.5x0.9mm NiPdAu			Termination Base Alloy: Copper Alloy (Cu)		
Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm
Silica Fused	60676-86-0	Mold Compound	41.265	8.047	412,650
Epoxy Resin	Trade secret	Mold Compound	1.800	0.351	18,000
Phenol Resin	Trade secret	Mold Compound	1.800	0.351	18,000
Carbon Black	1333-86-4	Mold Compound	0.135	0.026	1,350
Copper	7440-50-8	Lead Frame	45.196	8.813	451,959
Iron	7439-89-6	Lead Frame	1.068	0.208	10,684
Phosphorous	7723-14-0	Lead Frame	0.116	0.023	1,161
Zinc (Metal)	7440-66-6	Lead Frame	0.070	0.014	697
Fused silica	60676-86-0	Die Attach	0.557	0.109	5,565
Silver	7440-22-4	Die Attach	0.375	0.073	3,746
Epoxy Resin	Trade Secret	Die Attach	0.149	0.029	1,493
Acrylate resin	Trade secret	Die Attach	0.107	0.021	1,071
Biphenol A Glycidylether	25068-38-6	Die Attach	0.063	0.012	625
Silicon	7440-21-3	Dual Chip (Die)	6.150	1.199	61,500
Gold	7440-57-5	Wire Bond	0.500	0.098	5,000
Nickel	7440-02-0	Plating on external leads (pins)	0.585	0.114	5,850
Palladium	7440-05-3	Plating on external leads (pins)	0.033	0.006	325
Gold	7440-57-5	Plating on external leads (pins)	0.033	0.006	325
TOTALS:			100.000	19.500	1,000,000

0.0195 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.

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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>

Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)			J-STD-609A Product Marking and/or Pkg. Labeling e4
8.78	(mg) Total	Mold Compound	% of Total Weight 45.00
	Silica Fused	60676-86-0	91.70
	Epoxy Resin	Trade secret	4.00
	Phenol Resin	Trade secret	4.00
	Carbon Black	1333-86-4	0.30
	Total		100.00
9.06	(mg) Total	Lead Frame	% of Total Weight 46.45
	Copper	7440-50-8	97.30
	Iron	7439-89-6	2.30
	Phosphorous	7723-14-0	0.25
	Zinc (Metal)	7440-66-6	0.15
	Total		100.00
0.24	(mg) Total	Die Attach	% of Total Weight 1.25
	Fused silica	60676-86-0	44.52
	Silver	7440-22-4	29.97
	Epoxy Resin	Trade Secret	11.95
	Acrylate resin	Trade secret	8.57
	Biphenol A Glycidylether	25068-38-6	5.00
	Total		100.00
1.20	Total (mg)	Dual Chip (Die)	% of Total Weight 6.15
	Doped Silicon	7440-21-3	100.00
	Total		100.00
0.10	(mg) Total	Wire Bond	% of Total Weight 0.50
	Gold	7440-57-5	100.00
	Total		100.00
0.13	(mg) Total	Plating on external leads (pins)	% of Total Weight 0.65
	Nickel	7440-02-0	90.00
	Palladium	7440-05-3	5.00
	Gold	7440-57-5	5.00
	Total		100.00

19.50

100.00