Compliant with IEC 62474/ D9.00

MICROCHIP Semiconductor Device Type: L. (MOX) 069 BLCC Mette Tip				Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)			
Semiconductor Device Type: L (W2X) 068 PLCC Matte Tin "Contained In"			9/ Total						e3	
Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	1380.06	(mg) Total	Mold Compound	% ot Total Weight	28.28
Silica, vitreous	60676-86-0	Mold Compound	24.038	1173.054	240.380		Silica, vitreous	60676-86-0	85.00	
Epoxy Resin (No bromine, No diantimony trioxide)	Trade Secret	Mold Compound	1.732	84.529	17.322		Epoxy Resin	Trade Secret	6.13	
Phenolic Resin (No Br / CL SbO3, No diantimony trioxide)	Trade Secret	Mold Compound	1.732	84.529	17,322		Phenolic Resin	Trade Secret	6.13	
Epoxy, Cresol Novolac	29690-82-2	Mold Compound	0.693	33.812	6,929		Epoxy, Cresol Novolac	29690-82-2	2.45	
Carbon Black	1333-86-4	Mold Compound	0.085	4.140	848		Carbon Black	1333-86-4	0.30	
Copper	7440-50-8	Lead Frame	22.087	1077.843	220,869		Į-	Total	100.00	
Silver	7440-22-4	Lead Frame	0.429	20.954	4,294	1099.95	(mg) Total	Lead Frame	% of Total Weight	22.54
Zirconium	7440-67-7	Lead Frame	0.023	1.100	225		Copper	7440-50-8	97.99	
Manganese	7439-96-5	Lead Frame	0.001	0.055	11		Silver	7440-22-4	1.91	
Silver	7440-22-4	Die Attach	9.983	487.146	99,825		Zirconium	7440-67-7	0.10	
Diester Resin	94-80-4	Die Attach	1.997	97.429	19,965		Manganese	7439-96-5	0.01	
Functionalized Urethane Resin	72869-86-4	Die Attach	0.666	32.476	6,655			Total	100.00	
Epoxy Resin	9003-36-5	Die Attach	0.333	16.238	3,328	649.53	(mg) Total	Die Attach	% of Total Weight	13.31
Epoxy Resin	13561-08-5	Die Attach	0.333	16.238	3,328		Silver	7440-22-4	75.00	
Silicon	7440-21-3	Chip (Die)	12.310	600.728	123,100		Diester Resin	94-80-4	15.00	
Gold	7440-57-5	Wire Bond	5.120	249.856	51,200	Fun	ctionalized Urethane Resin	72869-86-4	5.00	
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	18.440	899.872	184,400		Epoxy Resin	9003-36-5	2.50	
		TOTALS:	100.000	4,880.000	1,000,000		Epoxy Resin		2.50	
4.8800 g Total Mass							Total	100.00	•	
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.						600.73	Total (mg) Doped Silicon	Chip (Die)	% of Total Weight	12.31
Joinpliance with the above EO Directives has been verified via int	amai design control	s, supplier deciarations, and for analytical test data.					Doped Silicon	7440-21-3	100.00	
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/offerings/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 extens "color" may be made from PNC plastic.										
nttp://ul.com/global/eng/pages/offerings/industries/chemicals/plas The protective "tubes" in which the specific product is shipped ar		·		·	outer box	249.86	(mg) Total Doped Gold	Wire Bond 7440-57-5	% of Total Weight	5.12
http://ul.com/global/eng/pages/offerings/industries/chemicals/plas	is form concerning s is form concerning s i its knowledge and s been compiled bas ecrets and some info f these parts and the	nyl chloride (PVC) plastic. "Window envelopes" used to l substances restricted by RoHS in Microchip Technology belief, as of the date listed in this form. Microchip Techn ed on the ranges provided in Material Safety Data Sheet ormation may not have been provided by subcontract as a average weight of anticipated significant toxic metals c	hold the pack Incorporated tology Incorporated s provided by ssemblers and	's semiconduc rated cannot (raw material s	ctor devices guarantee suppliers. suppliers.	249.86	,			5.12
nttp://ul.com/global/eng/pages/offerings/industries/chemicals/plas The protective "tubes" in which the specific product is shipped ar and certain "reels" may be made from PVC plastic. Wicrochip Technology Incorporated believes the information in thi n their original packing materials is true and correct to the best of the completeness and accuracy of data in this form because it has supplier information is often protected from disclosure as trade so nformation is provided only as estimates of the average weight of	e made from polyvir is form concerning: if its knowledge and been compiled basecrets and some infi f these parts and the ontained within silic y, express or implie s subsidiaries are co	nyl chloride (PVC) plastic. "Window envelopes" used to lead to	hold the pack Incorporated hology Incorpor s provided by seemblers and components. I	ing slip on the s semiconduc orated cannot of raw material solutions raw material solutions hese estimate	etor devices guarantee suppliers. suppliers. ss do not	249.86	,	7440-57-5	100.00	5.12
nttp://ul.com/global/eng/pages/offerings/industries/chemicals/plas The protective "tubes" in which the specific product is shipped an and certain "reels" may be made from PVC plastic. Wicrochip Technology Incorporated believes the information in thi n their original packing materials is true and correct to the best of the completeness and accuracy of data in this form because it has Supplier information is often protected from disclosure as trade si nformation is provided only as estimates of the average weight of nclude trace levels of dopants, metals, and non-metal materials of Wicrochip Technology Incorporated does not provide any warrant warranties provided by Microchip Technology Incorporated and its	e made from polyvir is form concerning of it its knowledge and is been compiled basecrets and some infi- it these parts and the ontained within silic y, express or implies is subsidiaries are consistent es.	nyl chloride (PVC) plastic. "Window envelopes" used to least the substances restricted by RoHS in Microchip Technology belief, as of the date listed in this form. Microchip Technology and on the ranges provided in Material Safety Data Sheets ormation may not have been provided by subcontract as a average weight of anticipated significant toxic metals con devices (silicon IC) in the finished parts. d, with respect to the information provided in this declar ontained in Microchip's standard terms and conditions on the Declarations and shall not be liable for any damages, on the provide of the provided of the provided in this declarations and shall not be liable for any damages, on the provided of the provided in this declarations and shall not be liable for any damages, on the provided in	hold the pack Incorporated tology incorpo s provided by ssemblers and components. I ration. The exc of sale. These	ing slip on the sect, consequer	ctor devices guarantee suppliers. suppliers. s do not		Doped Gold	7440-57-5 Total Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1	100.00	
http://ul.com/global/eng/pages/offerings/industries/chemicals/plas The protective "tubes" in which the specific product is shipped an and certain "reels" may be made from PVC plastic. Microchip Technology Incorporated believes the information in thi n their original packing materials is true and correct to the best of he completeness and accuracy of data in this form because it has supplier information is often protected from disclosure as trade se information is provided only as estimates of the average weight of include trace levels of dopants, metals, and non-metal materials or include trace levels of dopants, metals, and non-metal materials or include trace levels of dopants, metals, and non-metal materials or include trace levels of dopants, metals, and invoice incrochip Technology Incorporated does not provide any warrant varranties provided by Microchip Technology Incorporated and its incrochip's quotations, sales order acknowledgement, and invoic incrochip disclaims any duty to notify users of updates or change wherewise, suffered by users or third parties as a result of the user	e made from polyving is form concerning; if its knowledge and is been compiled basecrets and some infifered in the secrets and the ontained within silicity, express or implies a subsidiaries are concerning to the second in the	nyl chloride (PVC) plastic. "Window envelopes" used to least the substances restricted by RoHS in Microchip Technology belief, as of the date listed in this form. Microchip Technology and on the ranges provided in Material Safety Data Sheets ormation may not have been provided by subcontract as a average weight of anticipated significant toxic metals con devices (silicon IC) in the finished parts. d, with respect to the information provided in this declar antained in Microchip's standard terms and conditions of the Declarations and shall not be liable for any damages, of formation in Material Content Declarations (MCD) or indicated the substance of the substan	hold the pack Incorporated tology incorpo s provided by ssemblers and components. I ration. The exc of sale. These	ing slip on the sect, consequer	ctor devices guarantee suppliers. suppliers. s do not		Doped Gold (mg) Total	7440-57-5 Total Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	100.00 100.00 % of Total Weight	

Au 3:50 PM : 8/17/2015