

**3 Leads - T092**  
**Package Material Declaration**



Date	10-Mar-20	Product name	Integrated Circuit
Package Code	UA	RoHS Compliant	Y
Package Name	Plastic Single in Line, Through Hole Mount	Halogen Free	Y
Product Total Mass (g)	0.1035	Plating	Pure Matte Sn
<b>Product Number</b>		MLX92242	

**Material Declaration**

Part Name	Material Name	Component Weight (g)	Material Component (Element)	CAS #	Element ratio (%)	Material Weight (g)	Ratio total Wt (ppm)	
Leadframe	Zirconium Copper C151	0.0666	Copper (Cu)	7440-50-8	99.9	0.06650	642334	
			Zirconium (Zr)	7440-67-7	0.1	0.00007	643	
Frame plating	Silver	0.0003	Silver (Ag)	7440-22-4	100	0.00033	3231	
Die	Silicon	0.00076	Silicon (Si)	7440-21-3	99.99	0.00076	7331	
			others	-	0.01	0.0000001	1	
Die attach material	Silver-Epoxy Adhesive CRM1076WA	0.0001	Silver (Ag)	7440-22-4	82	0.00011	1030	
			Epoxy resin	9003-36-5	10	0.00001	126	
			Additives	-	8	0.00001	100	
Capacitor (1x)	Ceramic element	Ceramics	0.0011	Barium	7440-39-3	53.8	0.00057	5534
				Ceramic w/o declarable substances	13463-67-7	46.2	0.00049	4753
	Inner electrode	Nickel alloy	0.00028	Nickel (Ni)	7440-02-0	99.99	0.00028	2695
				Misc.	-	0.01	0.00000003	0.3
	Nickel Plating Layer	Ep-Ni	0.00002	Nickel (Ni)	7440-02-0	99.75	0.00002	173
				Misc.	-	0.25	0.00000005	0.4
	Tin Plating Layer	Ep-Sn	0.00005	Tin (Sn)	7440-31-5	99.75	0.00005	453
				Misc.	-	0.25	0.0000001	1
	Outer electrode	Copper	0.00017	Copper (Cu)	7440-50-8	99.95	0.00017	1661
				Misc.	-	0.05	0.0000001	1
Glass		0.00002	Glass w/o declarable	7631-86-9	99	0.00002	182	
Misc.	-	1	0.0000002	2				
Cap attach material	Solder paste SAC305 Sn96,5Ag3Cu0,5	0.001	Tin (Sn)	7440-31-5	96.5	0.00097	9321	
			Silver (Ag)	7440-22-4	3	0.00003	290	
			Copper (Cu)	7440-50-8	0.5	0.00001	48	
Wire	Gold with Palladium	0.00006	Gold (Au)	7440-57-5	99	0.00006	620	
			Palladium (Pd)	7440-05-3	1	0.0000006	6	
Lead Finish	Tin	0.0019	Tin (Sn)	7440-31-5	99.99	0.00193	18672	
			others	-	0.01	0.0000002	2	
Encapsulation	Silica EP G600	0.0311	Epoxy resin	Trade secret	6.25	0.00195	18799	
			Epoxy Cresol Novolac	29690-82-2	2.5	0.00078	7520	
			Phenol resin	Trade secret	2.5	0.00078	7520	
			Carbon black	1333-86-4	0.5	0.00016	1504	
			Silica fused	60676-86-0	82	0.02553	246648	
			Silica crystalline*	7631-86-9	6.25	0.00195	18799	

**Total package weight (g)** 0.1035

**Comments**

- Composition derived from MSDS and material CoC from vendors
- Component weight based on assembly of generic parts
- Reliability qualification reports are available upon request through the appropriate sales or marketing contact
- Third party testing for RoHS substances are available upon request to environment@melexis.com

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