

**3 Leads - TSOT**  
**Package Material Declaration**



Date	30-Jan-18	Product name	Integrated Circuit
Package Code	SE	RoHS Compliant	Y
Package Name	Thin Small Outline Transistor	Halogen Free	Y
Product Total Mass (g)	0.01117	Plating	Pure Matte Sn

<b>Product Number</b>	MLX90290
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**Material Declaration**

Part Name	Material Name	Component Weight (g)	Material Component (Element)	CAS #	Element ratio (%)	Material Weight (g)	Ratio total Wt (ppm)
Leadframe	High Copper Alloy C194	0.00453	Copper (Cu)	7440-50-8	97.45	0.00441	395244
			Iron (Fe)	7439-89-6	2.4	0.00011	9734
			Zinc (Zn)	7440-66-6	0.12	0.00001	487
			Phosphorus (P)	7723-14-0	0.03	0.000001	122
Frame plating	Silver	0.00015	Silver (Ag)	7440-22-4	100	0.00015	13430
Die	Silicon IC	0.00076	Silicon (Si)	7440-21-3	99.99	0.00076	67949
			others	-	0.01	0.0000001	7
Die attach material	Epoxy 84-1 LMISR4	0.00034	Epoxy resin	Proprietary	20	0.00007	6088
			Silver (Ag)	7440-22-4	75	0.00026	22831
			Aromatic amine	Proprietary	5	0.00002	1522
Wire	Gold	0.00002	Gold (Au)	7440-57-5	99.99	0.00002	1790
			others	-	0.01	0.000000002	0.2
Lead Finish	Tin	0.00026	Tin (Sn)	7440-31-5	99.99	0.00026	23276
			others	-	0.01	0.00000003	2
Encapsulation	Epoxy resin G600	0.00511	Multi aromatic resin	Proprietary	7.5	0.00038	34314
			Silica fused	60676-86-0	86	0.00439	393464
			Carbon Black	1333-86-4	0.5	0.00003	2288
			Epoxy Cresol Novolac	29690-82-2	2	0.00010	9150
			Phenol resin	Proprietary	4	0.00020	18301

**Total package weight (g)** 0.01117

**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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