Device Material Content

5555 NE Moore Ct.
Hillsboro OR 97124
custreq@lscc.com

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Package: **144 TQFP (1.4mm)**
Total Device Weight **1.400** **Grams**

Package Code: **TN144**
Products: (LA) 4kV, XO, XP2

Assembly: ASEM
Size (mm): 20 x 20 x 1.4
Lead pitch (mm): 0.5
MSL: 3
Reflow max (ºC): 260

	% of Total Pkg. Wt.	**Weight (g)**	**% of Total Pkg. Wt.**	**Weight (g)**	**Substance**	**CAS #**	**% of Subst.**	**Notes / Assumptions:**
Die	1.21%	0.0170			Silicon chip	7440-21-3	100.00%	Die size: 3.35 x 3.35 mm
Mold Compound	79.42%	1.1120	4.77%	0.0667	Epoxy Resin	-	6.00%	Mold Compound: Hitachi CEL9510HF10-U (ULA)
			3.18%	0.0445	Phenol Resin	-	4.00%	
			0.16%	0.0022	Carbon Black	1333-86-4	0.20%	
			70.92%	0.9930	Silica	60676-86-0	89.30%	
			0.40%	0.0056	Others	-	0.50%	
D/A Epoxy	0.15%	0.0021	0.12%	0.00164	Silver	7440-22-4	80.00%	Die attach: Henkel (Ablebond) 3230
			0.03%	0.00041	Esters & resins	-	20.00%	
Wire	0.21%	0.0029	0.21%	0.0029	Gold (Au)	7440-57-5	100.00%	0.8 mil wire diameter; 1 wire for each package lead
Plating	0.79%	0.0110	0.79%	0.0110	Tin (Sn)	7440-31-5	100.00%	Plating is 100% Matte Sn; thickness is >10.2µm
Leadframe	18.22%	0.2550	17.62%	0.2466	Copper (Cu)	7440-50-8	96.70%	C7025
			0.55%	0.0077	Nickel (Ni)	7440-02-0	3.01%	
			0.03%	0.0004	Silicon (Si)	7440-21-3	0.17%	
			0.01%	0.0001	Magnesium (Mg)	7439-95-4	0.03%	
			0.02%	0.0002	Silver (Ag)	7440-22-4	0.09%	

Notes:

The values listed above are nominal values based on studies of representatives of this particular package type, and are believed to be as accurate as possible.

Constituent substances and proportions in epoxy materials are before curing.

The information provided above is representative of the package as of the date listed, and is subject to change at any time.

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Rev. C