

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t1175it#pbf

(Engineering Calculation)

TO-220

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**TOTAL MASS (g) : 1.984122**

COMPONENT MATERIAL	VENDOR/ INDUSTRY NAMES	CONSTITUENT NAME	CAS NUMBER	CONSTITUENT MASS (g)	CONSTITUENT (PPM) OF MATERIAL	CONSTITUENT (PPM) OF TOTAL PKG.		
Active Device	Linear Technology	Silicon (Si)	7440-21-3	0.001595	1000000	803.881896973		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	1.428754	998500	720093.75		
		Iron (Fe)	7439-89-6	0.000000	0	0		
		Phosphorus (P)	7723-14-0	0.000000	0	0		
		Zinc (Zn)	7440-66-6	0.000000	0	0		
		Nickel (Ni)	7440-02-0	0.000000	0	0		
		Silicon (Si)	7440-21-3	0.000000	0	0		
		Magnesium (Mg)	7439-95-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.002146	1500	1081.58654785		
<b>Lead Frame Total:</b>				<b>1.430900</b>	<b>1000000</b>	<b>721175.3125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.011398	1000000	5744.74072266		
		<b>External Plating Total:</b>				<b>0.011398</b>	<b>1000000</b>	<b>5744.74072266</b>
		Inter. Plating Ni	7440-02-0	0.010000	834028.375	5040.01171875		
		Inter. Plating Ag	7440-22-4	0.001990	165971.640625	1002.96234131		
		<b>Internal Plating Total:</b>				<b>0.011990</b>	<b>1000000</b>	<b>6042.97412109</b>
Die Attach	95Pb / 5 Sn	Silver (Ag)	7440-22-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.000052	50000	26.2080612183		
		Lead (Pb)	7439-92-1	0.000989	950000	498.457183838		
		Silica (SiO2)	60676-86-0	0.000000	0	0		
		Indium (In)	7440-74-6	0.000000	0	0		
		Metal Oxide		0.000000	0	0		
		Antimony (Sb)	7440-36-0	0.000000	0	0		
		Resin (EP)		0.000000	0	0		
<b>Die Attach Total:</b>				<b>0.001041</b>	<b>1000000</b>	<b>524.665222168</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.054270	103000	27352.1445312		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.471567	895000	237670.328125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.001054	2000	531.217285156		
		<b>Encapsulation Total:</b>				<b>0.526891</b>	<b>1000000</b>	<b>265553.6875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000307	1000000	154.728378296		
					<b>TOTAL MASS (g) :</b>	<b>1.984122</b>		