

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

TSOT-23

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**TOTAL MASS (g) : 0.012717**

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	0.000583	1000000	45845.2617188		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.004582	975000	360313.90625		
		Iron (Fe)	7439-89-6	0.000113	24000	8885.95996094		
		Phosphorus (P)	7723-14-0	0.000001	300	78.6368103027		
		Zinc (Zn)	7440-66-6	0.000003	700	235.910461426		
		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	0.000000	0	0		
<b>Lead Frame Total:</b>				<b>0.004699</b>	<b>1000000</b>	<b>369514.40625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000663	1000000	52111.828125		
		<b>External Plating Total:</b>				<b>0.000663</b>	<b>1000000</b>	<b>52111.828125</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000080	1000000	6290.9453125		
		<b>Internal Plating Total:</b>				<b>0.000080</b>	<b>1000000</b>	<b>6290.9453125</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000468	750000	36802.03125		
		Tin (Sn)	7440-31-5	0.000000	0	0		
		Lead (Pb)	7439-92-1	0.000000	0	0		
		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)		0.000156	250000	12267.3427734		
<b>Die Attach Total:</b>				<b>0.000624</b>	<b>1000000</b>	<b>49069.3710938</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.000777	130000	61100.8046875		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.004963	830000	390274.5		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000209	35000	16435.09375		
		Carbon Black (C)	1333-86-4	0.000030	5000	2359.10424805		
		<b>Encapsulation Total:</b>				<b>0.005979</b>	<b>1000000</b>	<b>470169.5</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000089	1000000	6998.67675781		
					<b>TOTAL MASS (g) :</b>	<b>0.012717</b>		