

TL062SG-13, TL072SG-13, TL082SG-13

Part Number: **TL0x2SG**  
Weight (mg): 74.5228

ρ = package designator  
See Data Sheet

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Material(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall				
Chip	Silicon w/Metal	Doped Silicon*	7440-21-3	100.00%	1.85	1.3776	1000000	18486				
Leadframe	CDA-194	Cu	7440-50-8	97.40%	52.37	39.0286	974000	510097				
		Fe	7439-89-6	2.40%			24000	12569				
		P	7723-14-0	0.08%			800	419				
		Zn	7440-66-6	0.12%			1200	628				
Bond Wire	Gold Wire	Ag	7440-22-4	100.00%	0.96	0.714	1000000	9581				
		Gold	7440-57-5	100.00%	0.36	0.2661	1000000	3571				
Encapsulation	EME-G600	SiO2	60676-86-0	87.45%	41.46	30.895	874500	362542				
		Epoxy Resin	-----	5.00%			50000	20729				
		Phenol Resin	-----	5.00%			50000	20729				
		Cresol Novolac	29690-82-2	2.00%			20000	8291				
		C	1333-86-4	0.50%			5000	2073				
		Bismuth/Bismuth compound	-----	0.05%			500	207				
		Ag	7440-22-4	80.00%			800000	5819				
Die Attach Epoxy	QMI519	Acrylate	----	15.84%	0.73	0.5421	158449	1153				
		Bismaleimide resin	----	3.00%			30000	218				
		Polymer of polybutadiene and anhydride	----	1.00%			10000	73				
		palladium compound	----	0.15%			1500	11				
		2,6-Di-tert-butyl-p-cresol	128-37-0	0.01%			50	0				
		Hydroquinone	123-31-9	0.00%			1	0				
		Tin solder	Pure Tin	Sn			7440-31-5	100.00%	2.28	1.6994	1000000	22804
							<b>Total</b>	<b>100.00</b>	<b>74.5228</b>		<b>1000000</b>	

Tolerance ±10%

This data is based on information provided by our suppliers. We believe it to be correct but do not routinely validate it by measurement. It is for guidance only and Diodes Inc. does not guarantee its absolute accuracy or completeness

\* The Silicon Chip is doped at atomic levels with trace amounts of elements that may include Phosphorus, Boron, Arsenic, and other elements. Metalization may include Titanium, Nickel, Aluminum, Silver or Gold These substances are not reported where their concentration is less than the minimum reportable level per the guidelines specified in the Tables of EIA JIG-101, *Material Composition Declaration for Electronic Products*.

Asbestos  
Antimony Compounds  
Azo compounds  
Cadmium and cadmium compounds  
Certain Shortchain Chlorinated Paraffins  
Chlorinated organic compounds  
Dimethyl fumarate  
Halogens  
Hexavalent chromium compounds  
Lead and lead compounds  
Mercury and mercury compounds

REACH SVHCs and other Substances of Concern:

Anthracene  
4,4'- Diaminodiphenylmethane  
Dibutyl phthalate  
Cyclododecane  
Cobalt dichloride  
Diarsenic pentaoxide  
Diarsenic trioxide  
Sodium dichromate, dihydrate

Beryllium, Beryllium Alloys and Compounds  
Hydrazine  
Tetrachloroethylene  
Toluene  
Toluene Diisocyanate

Organic tin compounds  
Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)  
Ozone Depleting Substances - Class II (HCFCs)  
Perfluorooctane Sulphonate (PFOS) or related compounds  
Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including DecaBDDI  
Polychlorinated Biphenyls (PCBs)  
Polychlorinated Naphthalenes (> 3 chlorine atoms)  
Radioactive Substances  
Red Phosphorous  
Tributyl Tin (TBT) and Triphenyl Tin (TPT)  
Tributyl Tin Oxide (TBTO)

5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)  
Bis (2-ethyl(hexyl)phthalate) (DEHP)  
Hexabromocyclododecane (HBCDD)  
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)  
Bis(tributyltin)oxide  
Lead hydrogen arsenate  
Triethyl arsenate  
Benzyl butyl phthalate

Methylene Chloride  
Trichloroethene  
Methyl Ethyl Ketone  
Xylenes