Diodes Inc. Material Data Sheet Rev: Sep 2010

Part Number: APX809-xxSAG/SRG, APX810-xxSAG/SRG

Weight (mg): 8.775

Element	Material Group	Materials	CAS (if applicable)	Average mass homogeneous Materal(%)	Percent of whole (%)	Mass (mg)	ppm Homogeneous Material	ppm overall
Die,Analog	Doped silicon	Doped silicon *	7440-21-3	100.00%	5.113	0.449	1000000	51126
SSOT-23 leadframe	CDA 194	Cu	7440-50-8	97.40%	29.983	2.631	974000	292038
		Fe	1309-37-1	2.40%			24000	7196
		Р	7723-14-0	0.08%			800	240
		Zn	7440-66-6	0.12%			1200	360
	Pure silver	Ag	7440-22-4	100.00%	1.179	0.103	1000000	11789
Bonding wire	1.0mil	Au	7440-57-5	100.00%	0.437	0.038	1000000	4374
Molding compound	CEL-1702HF9	SiO2	60676-86-0	87.30%	59.436	5.215	873000	518873
		Epoxy Resin	29690-82-2	5.00%			50000	29718
		Phenol Resin	26834-02-6	5.00%			50000	29718
		Aromatic poly- phosphate		2.50%			25000	14859
		С	1333-86-4	0.20%			2000	1189
Die attached epoxy	84-3J	Epoxy Resin		47.50%	0.941	0.083	475000	4468
		Silicon dioxide		45.00%			450000	4233
		curing agent & hardener		7.50%			75000	705
Tin solder	Pure Tin	Sn	7440-31-5	100.00%	2.911	0.255	1000000	29115
<u> </u>			<u> </u>		100.00	8.775		1000000

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

This product or product family does not contain any of the following substances except as CURRENTLY exempted by ELV II and RoHS and reported above:

Antimony compounds Organic tin compounds

Asbestos Ozone Depleting Substances - Class I (CFCs, HBFCs, etc.)

Azo compounds Ozone Depleting Substances - Class II (HCFCs)

Cadmium and cadmium compounds Perfluorooctane Sulphonate (PFOS) or related compounds

Certain Shortchain Chlorinated Paraffins Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) including DecaBDE

Chlorinated organic compounds Polychlorinated Biphenyls (PCBs)

Halogens Polychlorinated Naphthalenes ( > 3 chlorine atoms)

Hexavalent chromium compounds Radioactive Substances

ead and lead compounds Tributyl Tin (TBT) and Triphenyl Tin (TPT)

Mercury and mercury compounds Tributyl Tin Oxide (TBTO)

This product or product family does not contain any chemicals designated by the European Chemicals Agency (ECHA) as Substances of Very High Concern (SVHCs) under REACH. Please check the document at <a href="http://www.diodes.com/\_files/products\_lead\_free/RoHS\_Product\_List.pdf">http://www.diodes.com/\_files/products\_lead\_free/RoHS\_Product\_List.pdf</a> for the current compliance status.

<sup>\*</sup> 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, <u>Material Composition Declaration for Electronic Products</u>.