

Part Number: **S8KC-13, S8MC-13**  
Weight (mg): 210

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	Si (95~98%)	7440-21-3	95.00%	4.95	10.4	950000	47048
		PbO (1~4%)	1317-36-8	4.00%			40000	1981
		Ni (1%)	7440-02-0	1.00%			10000	495
Solder Paste	RoHS Exempt High Temperature	Pb	7439-92-1	92.50%	2.00	4.2	925000	18500
		Sn	7440-31-5	5.00%			50000	1000
		Ag	7440-22-4	2.50%			25000	500
Leadframe & Clip	Copper Alloy	Cu (99.95%)	7440-50-8	99.95%	42.05	88.3	999500	420266
		Zn (0.004%)	7440-66-6	0.01%			60	25
		Fe (0.01%)	7439-89-6	0.01%			100	42
		P (0.034%)	7723-14-0	0.03%			340	143
Encapsulation	Epoxy	Silica (SiO <sub>2</sub> ) (60~80%)	14808-60-7	70.00%	50.00	105	700000	350000
		Phenol-formaldehyde polymer (5~15%)	29690-82-2	15.00%			150000	75000
		Phenol-formaldehyde polymer (5~15%)	9003-35-4	10.00%			100000	50000
		Sb <sub>2</sub> O <sub>3</sub> (0~5%)	1309-64-4	2.50%			25000	12500
		TBBA-diglycidyl-ether oligomer (0~5%)	40039-93-8	2.50%			25000	12500
Lead Plating Finish	Tin Solder	Sn (>99.5%)	7440-31-5	100.00%	1.00	2.1	25000	10000
				<b>Total</b>	<b>100.00</b>	<b>210.00</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](#).

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:

- |                                          |                                                                                                   |
|------------------------------------------|---------------------------------------------------------------------------------------------------|
| 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 <b>DecaBDE</b> |
| Chlorinated organic compounds            | Polychlorinated Biphenyls (PCBs)                                                                  |
| Hexavalent chromium compounds            | Polychlorinated Naphthalenes (> 3 chlorine atoms)                                                 |
| Lead and lead compounds                  | Radioactive Substances                                                                            |
| Mercury and mercury compounds            | Tributyl Tin (TBT) and Triphenyl Tin (TPT)                                                        |
| Organic tin compounds                    | Tributyl Tin Oxide (TBTO)                                                                         |
| <b>REACH SVHCs:</b>                      |                                                                                                   |
| Anthracene                               | 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)                                                |
| 4,4'- Diaminodiphenylmethane             | Bis (2-ethyl(hexyl)phthalate) (DEHP)                                                              |
| Dibutyl phthalate                        | Hexabromocyclododecane (HBCDD)                                                                    |
| Cyclododecane                            | Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)                                       |
| Cobalt dichloride                        | Bis(tributyltin)oxide                                                                             |
| Diarsenic pentaoxide                     | Lead hydrogen arsenate                                                                            |
| Diarsenic trioxide                       | Triethyl arsenate                                                                                 |
| Sodium dichromate, dihydrate             | Benzyl butyl phthalate                                                                            |

**RoHS Exemptions 5 for Pb in Glass in Electronic Components and 7a for Pb in High Temperature, High %Pb in Solder are applied**