


MATERIAL DECLARATION SHEET



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|-----------------|--------------------------------|-----|---|-------------------------------------------------------------------------------------|
| Material Number | CD214B-T5.0A~170A, 5.0CA~170CA | | |  |
| Product Line | Semiconductor Products | | | |
| Compliance Date | 2011/01/01 | | | |
| RoHS Compliant | Yes | MSL | 1 | |

| No. | Construction Element(subpart) | Homogeneous Material | Material weight [mg] | Homogeneous Material\ Substances | CASRN if applicable | Materials Mass % | Material Mass % of total unit wt. | Subpart mass of total wt. (%) |
|-----|-----------------------------------------|----------------------|----------------------|----------------------------------|---------------------|------------------|-----------------------------------|-------------------------------|
| 1 | Dice | Silicon | 2.350 | Silicon | 7440-21-3 | 60.1800% | 1.529% | 2.540 |
| | | | | Phosphorus | 7723-14-0 | 0.0100% | 0.0003% | |
| | | | | Boron | 7440-42-8 | 0.0100% | 0.0003% | |
| | | | | Nickel) | 7440-02-0 | 14.8000% | 0.376% | |
| | | | | Lead | 7439-92-1 | 12.5000% | 0.318% | |
| | | | | Silicon dioxide | 7631-86-9 | 10.0000% | 0.254% | |
| | | | | Aluminum oxide | 1344-28-1 | 2.5000% | 0.0635% | |
| 2 | High-melting point Solder paste | solder paste | 2.150 | Tin | 7440-31-5 | 5.000% | 0.116% | 2.324 |
| | | | | Lead | 7439-92-1 | 92.500% | 2.150% | |
| | | | | Silver | 7440-22-4 | 2.500% | 0.058% | |
| 3 | Lead frame / Leads / Disc | N/A | 33.50 | Copper | 7440-50-8 | 99.800% | 36.139% | 36.212 |
| | | | | Iron | 7439-89-6 | 0.150% | 0.054% | |
| | | | | Phosphorus | 7723-14-0 | 0.050% | 0.018% | |
| 4 | Molding Compound (Plastic Package Only) | Epoxy material | 53.50 | Silica | 14808-60-7 | 76.000% | 43.952% | 57.831 |
| | | | | Epoxy resin | 25928-94-3 | 9.000% | 5.205% | |
| | | | | Phenolic resin-A,-B | 9003-35-4 | 8.000% | 4.626% | |
| | | | | Hydroxide metal | N/A | 6.000% | 3.470% | |
| 5 | Plating | Matte-Tin | 1.011 | Carbon black | 1333-86-4 | 1.000% | 0.578% | 1.093 |
| | | Total Weight | 92.511 | Tin | 7440-31-5 | 100.000% | 1.093% | |

This Document was updated on: 2015/02/09

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(EU) RoHS Directive 2011/65/EU ANNEX Application of lead which are exempted from the requirements

7(a) Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

7(c)-I Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.