

Zetex Material Data Sheet

Reference: SOT89 Softsolder Review date: April 2007

| Construction element | Materials | CAS (where available) | Average mass (%) | Sum (%) | Mass (mg) | ppm |
|----------------------|----------------------|-----------------------------|------------------|------------|-----------|--------|
| Chip | Silicon | 7440-21-3 | 0.43 | 0.43 | 0.22 | 4280 |
| Leadframe | Copper | 7440-50-8 | 49.16 | 49.46 | 25.27 | 491634 |
| | Iron | 7439-89-6 | 0.06 | | 0.03 | 584 |
| | Phosphorus | 7723-14-0 | 0.02 | | 0.01 | 195 |
| | Silver | 7440-22-4 | 0.14 | | 0.07 | 1362 |
| | Nickel | 7440-02-0 | 0.08 | | 0.04 | 778 |
| Die Attach | Tin | 7440-31-5 | 0.03 | 0.66 | 0.02 | 331 |
| | Silver | 7440-22-4 | 0.01 | | 0.01 | 99 |
| | Lead | 7439-92-1 | 0.62 | | 0.32 | 6180 |
| Wires | Gold wire | 7440-57-5 | 0.06 | 0.06 | 0.03 | 584 |
| Encapsulation | Phenol Novolac | 9003-35-4 | 3.43 | 48.04 | 1.76 | 34297 |
| | Epoxy Cresol Novolac | 29690-82-2 | 6.31 | | 3.24 | 63118 |
| | Silica, fused | 60676-86-0 | 35.14 | | 18.06 | 351376 |
| | Antimony oxide | 1309-64-4 | 1.51 | | 0.78 | 15083 |
| | Carbon Black | 1333-86-4 | 0.14 | | 0.07 | 1393 |
| | Undisclosed | - | 1.51 | | 0.78 | 15083 |
| Leadfinish | Matte Tin | 7440-31-5 | 1.36 | 1.36 | 0.70 | 13619 |
| | | | Sum Total | 100.00% | 51.40 mg | _ |

Fluctuation margin ±10%

This environmental data is based on information provided by our suppliers; we believe it to be correct but do not routinely validate it by measurement.

The information is for guidance only, and Zetex does not guarantee its absolute accuracy or completeness.

The active part of each device is a silicon chip doped at atomic levels (some tens of ppb) with Phosphorus, Boron and Arsenic. The back of the die is raw or metallized with thin layers of Titanium, Nickel, Silver or Gold in order to enhance the die bonding to the header or leadframe. These and other substances are not reported as being present in Zetex products where their concentration is less than 20ppm, as they are not considered detectable by normal analytical methods.

This package uses a high temperature melting point solder with >85% which is wholly contained within the package. This application is exempted form the RoHS Directive.

The Company reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service.

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