

TOREX SEMICONDUCTOR LTD.
Quality Assurance Dept.

Composition Table

Product(Pb-free): XCL222xxxxER-G
Typical mass: 22.0 mg

| Part | Part name | Weight(mg) | Material name | Ratio(ppm) | CAS No. |
|----------------|--------------------|------------------|------------------|------------|------------|
| Coil | Core (Ferrite) | 11.450 | Iron oxide | 520500 | 1309-37-1 |
| | | 2.257 | Zinc oxide | 102600 | 1314-13-2 |
| | | 2.199 | Nickel oxide | 99900 | 1313-99-1 |
| | | 0.623 | Copper oxide | 28300 | 1317-38-0 |
| | | 0.078 | Tin oxide | 3500 | 18282-10-5 |
| | | | | | |
| | Internal conductor | 0.418 | Silver | 19000 | 7440-22-4 |
| | | | | | |
| | Electrode | 0.477 | Silver | 21700 | 7440-22-4 |
| | | 0.175 | Nickel | 8000 | 7440-02-0 |
| | 0.224 | Tin | 10200 | 7440-31-5 | |
| | | | | | |
| Adhesive Resin | Adhesive Resin | 0.068 | Epoxy resin | 3100 | - |
| | | 0.016 | Organic filler | 700 | - |
| | | 0.016 | Inorganic filler | 700 | - |
| | | | | | |
| IC | Silicon chip | 0.421 | Silicon | 19200 | 7440-21-3 |
| | | - | Arsenic | <1 | 7440-38-2 |
| | | | | | |
| | Lead pad | 1.276 | Nickel | 58000 | 7440-02-0 |
| | | 0.121 | Silver | 5500 | 7440-22-4 |
| | | 0.014 | Gold | 600 | 7440-57-5 |
| | | | | | |
| | Die attach | 0.025 | Epoxy resin | 1200 | - |
| | | 0.019 | Silica | 900 | 14808-60-7 |
| | | | | | |
| | Bonding wire | 0.139 | Gold | 6300 | 7440-57-5 |
| | | | | | |
| | Resin | 1.314 | Silica | 59700 | 60676-86-0 |
| | | 0.186 | Epoxy resin | 8500 | - |
| | 0.186 | Phenol resin | 8500 | - | |
| | 0.255 | Metal hydroxide | 11600 | - | |
| | 0.042 | Silica (crystal) | 1900 | 14808-60-7 | |
| | | | | | |

* The component composition is based on the information provided by raw material vender.

* The mass of the IC and its fractions could be different due to the manufacturing conditions of materials.

* Any indication "-" in CAS number means "confidential."