

The RoHS directive, REACH regulation, and other laws and regulations related to the management of environmentally hazardous substances come into effect. When developing products, the global environmental load must be considered. ROHM pursues green procurement and endeavors to increase the detection accuracy of chemicals contained in parts and procured materials while at the same time placing great importance on the internal chemical management system that was built to ensure that no prohibited substances are procured, used, or shipped in order to provide a steady supply of worry-free products.

TR-TO247-JE_Rev.6

| Type | Package Code | ROHM Package | Mass (mg) | Part No. |
|------------|--------------|--------------|-----------|----------|
| Transistor | - | TO-247 | 6011.1409 | - |

| No | Part Name | Weight (mg) | Substance Name | CAS No | Weight (mg) | Portion vs. Products | Portion vs. Part Name |
|----|----------------------------|-------------|---------------------------|------------|------------------|----------------------|-----------------------|
| 1 | Mold compound | 1956.0100 | Silica (crystalline) | 14808-60-7 | 1475.5997 | 24.55% | 75.44% |
| | | | Epoxy resin | - | 251.9412 | 4.19% | 12.88% |
| | | | Phenol-formaldehyde resin | - | 193.2609 | 3.22% | 9.88% |
| | | | Antimony trioxide | 1309-64-4 | 29.3402 | 0.49% | 1.50% |
| | | | Carbon black | 1333-86-4 | 5.8680 | 0.10% | 0.30% |
| | | | <i>Subtotal</i> | | <i>1956.0100</i> | | <i>32.54%</i> |
| 2 | Lead frame (Base material) | 3990.4500 | Copper (Cu) | 7440-50-8 | 3986.4600 | 66.32% | 99.90% |
| | | | Iron (Fe) | 7439-89-6 | 3.9900 | 0.07% | 0.10% |
| | | | <i>Subtotal</i> | | <i>3990.4500</i> | | <i>66.38%</i> |
| 3 | External plating | 12.8000 | Tin (Sn) | 7440-31-5 | 12.8000 | 0.21% | 100.00% |
| | | | <i>Subtotal</i> | | <i>12.8000</i> | | <i>0.21%</i> |
| 4 | Die | 22.5909 | Silicon (Si) | 7440-21-3 | 22.2430 | 0.37% | 98.46% |
| | | | Nickel (Ni) | 7440-02-0 | 0.1890 | 0.00% | 0.84% |
| | | | Silver (Ag) | 7440-22-4 | 0.1110 | 0.00% | 0.49% |
| | | | Gold (Au) | 7440-57-5 | 0.0479 | 0.00% | 0.21% |
| | | | <i>Subtotal</i> | | <i>22.5909</i> | | <i>0.38%</i> |
| 5 | Die attach | 25.0000 | Lead (Pb) *2 | 7439-92-1 | 23.3750 | 0.39% | 93.50% |
| | | | Tin (Sn) | 7440-31-5 | 1.2500 | 0.02% | 5.00% |
| | | | Silver (Ag) | 7440-22-4 | 0.3750 | 0.01% | 1.50% |
| | | | <i>Subtotal</i> | | <i>25.0000</i> | | <i>0.42%</i> |
| 6 | Bonding wire | 4.2900 | Aluminum (Al) | 7429-90-5 | 4.2900 | 0.07% | 100.00% |
| | | | <i>Subtotal</i> | | <i>4.2900</i> | | <i>0.07%</i> |
| | | | <i>Total</i> | - | <i>6011.1409</i> | <i>100%</i> | <i>-</i> |

Note

*2 : It is exempted from the RoHS, because of the high melting point solder.

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