

PEREGRINE MATERIAL DECLARATION FORM

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|---------------------------------|---|
| Product: | PE4309 |
| Ordering Codes: | 4309-51, 4309-52 |
| Description: | 50 Ohm Digital Attenuator 6-bit, 31.5 dB, DC - 4.0 GHz |
| Package: | 24L 4X4 QFN |
| Environmental Compliance | EU RoHS Directive 2002/95/EC, REACH - EU ECHA SVHC, Arsenic Free, JIG 101 - EIA/EICTA/JEITA, Halogen Free - IEC61249-2-21, PFOS Free - 2006/122/EC, Antimony Trioxide Free |
| Lead Finish | 100% Matte Tin |
| Availability | Now |

| Component | Material | CAS Number | Weight (mg) | % | PPM |
|---------------------------|--|--------------|------------------|---------|-----------|
| Die | | | | | |
| | Sapphire (Al ₂ O ₃) | 1344-28-1 | 1.352162 | 3.15% | 31,539 |
| | Silicon (Si) | 7440-21-3 | 0.000449 | 0.00% | 10 |
| | Arsenic (As) | 7440-38-2 | 0.000002 | 0.00% | 0 |
| | Boron (B) | 7440-42-8 | 0.000001 | 0.00% | 0 |
| | Phosphorous (P) | 7723-14-0 | 0.000151 | 0.00% | 4 |
| | Titanium (Ti) | 7440-32-6 | 0.000052 | 0.00% | 1 |
| | Tungsten (W) | 7440-33-7 | 0.000004 | 0.00% | 0 |
| | Copper (Cu) | 7440-50-8 | 0.000007 | 0.00% | 0 |
| | Aluminum (Al) | 7429-90-5 | 0.002251 | 0.01% | 53 |
| | Cobalt (Co) | 7440-48-4 | 0.000000 | 0.00% | 0 |
| Package | | | | | |
| Leadframe | Copper (Cu) | 7440-50-8 | 18.465800 | 43.07% | 430,712 |
| | Iron (Fe) | 7439-89-6 | 0.445100 | 1.04% | 10,382 |
| | Zinc (Zn) | 7440-66-6 | 0.022700 | 0.05% | 529 |
| | Phosphorus (P) | 7723-14-0 | 0.005700 | 0.01% | 133 |
| Die Attach | Silver (Ag) | 7440-22-4 | 0.115400 | 0.27% | 2,692 |
| | Epoxy Resin | 9003-36-5 | 0.028800 | 0.07% | 672 |
| | t-Butyl phenyl glycidyl ether | 3101-60-8 | 0.012000 | 0.03% | 280 |
| | Phenolic hardener | 92-88-6 | 0.002400 | 0.01% | 56 |
| | Butyl cellosolve acetate | 112-07-2 | 0.001600 | 0.00% | 37 |
| Gold Wire | Gold (Au) | 7440-57-5 | 0.283100 | 0.66% | 6,603 |
| 100 Matte Tin Lead Finish | Tin (Sn) | 7440-31-5 | 0.278300 | 0.65% | 6,491 |
| Mold Compound | Silica Fused | 60676-86-0 | 20.042600 | 46.75% | 467,490 |
| | Epoxy Resin | Trade secret | 0.874300 | 2.04% | 20,393 |
| | Phenol Resin | Trade secret | 0.874300 | 2.04% | 20,393 |
| | Carbon Black | 1333-86-4 | 0.065600 | 0.15% | 1,530 |
| Total Weight (mg) | | | 42.872779 | 100.00% | 1,000,000 |