

## PEREGRINE MATERIAL DECLARATION FORM

|                          |   |
|--------------------------|---|
| <b>Product:</b>          | PE4280                                    |
| <b>Ordering Codes:</b>   | 4280-51; 4280-52                          |
| <b>Description:</b>      | Absorptive SPDT Broadband Switch - 75 Ohm |
| <b>Package:</b>          | 20L 4X4 QFN                               |
| <b>RoHS Compliant</b>    | Yes                                       |
| <b>Lead Finish</b>       | 100% Matt Tin                             |
| <b>Peak Reflow Temp</b>  | 260 degree C                              |
| <b>Time at Peak Temp</b> | 20 Sec                                    |
| <b>Max No. of Reflow</b> | Three                                     |
| <b>Availability</b>      | Now                                       |

| Component           | Material                                    | CAS Number | Weight (mg) | %      | PPM     |
|---------------------|---|------------|-------------|--------|---------|
| <b>Die</b>          |   |            |             |        |         |
|                     | Sapphire:                                   | 1344-28-1  | 1.328922    | 3.05%  | 30,512  |
|                     | Silicon:                                    | 7440-21-3  | 0.000254    | 0.00%  | 6       |
|                     | Silicon Dioxide:                            | 7631-86-9  | 0.005236    | 0.01%  | 120     |
|                     | Silicon Nitride:                            | 12033-89-5 | 0.003110    | 0.01%  | 71      |
|                     | Tungsten Silicide:                          | 12039-88-2 | 0.000241    | 0.00%  | 6       |
|                     | Titanium:                                   | 7440-33-6  | 0.000279    | 0.00%  | 6       |
|                     | Titanium Nitride:                           | 25583-20-4 | 0.000808    | 0.00%  | 19      |
|                     | Aluminium Alloy (98.5%-Al, 1%-Si, 0.5%-Cu): | 7429-90-5  | 0.003645    | 0.01%  | 84      |
|                     | Arsenic:                                    | 7440-38-2  | 0.000001    | 0.00%  | 0       |
|                     | Boron:                                      | 7440-42-8  | 0.000121    | 0.00%  | 3       |
|                     | Phosphorous:                                | 7723-14-0  | 0.000110    | 0.00%  | 3       |
| <b>Package</b>      |   |            |             |        |         |
| Leadframe 421950    | Cu:   | 7440-50-8  | 13.837525   | 31.77% | 317,712 |
|                     | Fe:   | 7439-89-6  | 0.333520    | 0.77%  | 7,658   |
|                     | Zn:   | 7440-66-6  | 0.017031    | 0.04%  | 391     |
|                     | P:  | 7723-14-0  | 0.004258    | 0.01%  | 98      |
|                     | Ag (weight estimate):                       | 7440-22-4  | 0.168000    | 0.39%  | 3,857   |
| Die attach material | Silver (65 - 85):                           | 7440-22-4  | 0.129812    | 0.30%  | 2,981   |
|                     | Epoxy Resin (15 - 25):                      | 9003-36-5  | 0.034617    | 0.08%  | 795     |
|                     | t-Butyl phenyl glycidyl ether (5 - 10):     | 3101-60-8  | 0.012981    | 0.03%  | 298     |
|                     | Phenolic hardener (1 - 2):                  | 92-88-6    | 0.002596    | 0.01%  | 60      |
|                     | Butyl cellosolve acetate (0.5 - 1.5):       | 112-07-2   | 0.001731    | 0.00%  | 40      |