

## Material Composition for M22-532XXXXP

| Product Information |                         |
|---------------------|-------------------------|
| Part Number:        | M22-532XX05P            |
| Part Description:   | 2.00mm pitch Pin Header |
| Part Weight (g):    | (0.0405 * XX) + 0.1     |

| Process Data          |                      |
|-----------------------|----------------------|
| Peak Reflow (Deg. C)  | 260°C for 10 seconds |
| Termination Finish    | Gold over Nickel     |
| RoHS Compliant? (Y/N) | Yes                  |

| Homogeneous Material Location     | Weight (g)    | Tolerance            | Substance Name                                                    | CAS #      |
|-----------------------------------|---------------|----------------------|-------------------------------------------------------------------|------------|
| Contact - Phosphor Bronze         | 0.0284 * XX   | 2%                   | Copper                                                            | 7440-50-8  |
|                                   | 0.0015 * XX   | 0.5%                 | Tin                                                               | 7440-31-5  |
|                                   | 0.00006 * XX  | 0.5%                 | Phosphorus                                                        | 7723-14-0  |
|                                   | 0             | (0.00006 * XX)g max  | Nickel (impurity only)                                            | 7440-02-0  |
|                                   | 0             | (0.00009 * XX)g max  | Zinc (impurity only)                                              | 7440-66-6  |
|                                   | 0             | (0.00003 * XX)g max  | Iron (impurity only)                                              | 7439-89-6  |
| Contact - Plating                 | 0             | (0.000014 * XX)g max | Lead (impurity only)                                              | 7439-92-1  |
|                                   | 0             | (0.00015 * XX)g max  | Other Impurities                                                  |            |
|                                   | 0.000498 * XX | 10%                  | Nickel                                                            | 7440-02-0  |
|                                   | 0.000054 * XX | 5%                   | Gold                                                              | 7440-57-5  |
|                                   |               |                      |                                                                   |            |
|                                   |               |                      |                                                                   |            |
| Moulding (total weight)           | 0.01 * XX     | 5%                   | 30% GF Nylon 6T                                                   |            |
| Containing:                       | 0.005 * XX    | 5%                   | Nylon 6T                                                          | 63428-83-1 |
|                                   | 0.003 * XX    | 5%                   | 30% Glass Fibre                                                   | 65997-17-3 |
|                                   | 0.0005 * XX   | 5%                   | Antimony Trioxide                                                 | 1309-64-4  |
|                                   | 0.0015 * XX   | 5%                   | Other Brominated Flame Retardants<br>[ISO 1043-4 Code No: FR(17)] |            |
|                                   |               |                      |                                                                   |            |
| Pick and Place Cap (total weight) | 0.1 * XX      | 5%                   | 30% GF Nylon 6T                                                   |            |
| Containing:                       | 0.05 * XX     | 5%                   | Nylon 6T                                                          | 63428-83-1 |
|                                   | 0.03 * XX     | 5%                   | 30% Glass Fibre                                                   | 65997-17-3 |
|                                   | 0.005 * XX    | 5%                   | Antimony Trioxide                                                 | 1309-64-4  |
|                                   | 0.015 * XX    | 5%                   | Other Brominated Flame Retardants<br>[ISO 1043-4 Code No: FR(17)] |            |
|                                   |               |                      |                                                                   |            |

## Material Composition for M22-532XXXXP

| Product Information |                         |
|---------------------|-------------------------|
| Part Number:        | M22-532XX46P            |
| Part Description:   | 2.00mm pitch Pin Header |
| Part Weight (g):    | (0.0411 * XX) + 0.1     |

| Process Data          |                      |
|-----------------------|----------------------|
| Peak Reflow (Deg. C)  | 260°C for 10 seconds |
| Termination Finish    | 100% Tin over Nickel |
| RoHS Compliant? (Y/N) | Yes                  |

Note: Tin plating is subject to 1,000ppm max Lead impurity.

| Homogeneous Material Location     | Weight (g)    | Tolerance            | Substance Name                                                    | CAS #      |
|-----------------------------------|---------------|----------------------|-------------------------------------------------------------------|------------|
| Contact - Phosphor Bronze         | 0.0284 * XX   | 2%                   | Copper                                                            | 7440-50-8  |
|                                   | 0.0015 * XX   | 0.5%                 | Tin                                                               | 7440-31-5  |
|                                   | 0.00006 * XX  | 0.5%                 | Phosphorus                                                        | 7723-14-0  |
|                                   | 0             | (0.00006 * XX)g max  | Nickel (impurity only)                                            | 7440-02-0  |
|                                   | 0             | (0.00009 * XX)g max  | Zinc (impurity only)                                              | 7440-66-6  |
|                                   | 0             | (0.00003 * XX)g max  | Iron (impurity only)                                              | 7439-89-6  |
| Contact - Plating                 | 0             | (0.000014 * XX)g max | Lead (impurity only)                                              | 7439-92-1  |
|                                   | 0             | (0.00015 * XX)g max  | Other Impurities                                                  |            |
|                                   | 0.000498 * XX | 10%                  | Nickel                                                            | 7440-02-0  |
|                                   | 0.000614 * XX | 10%                  | Tin                                                               | 7440-31-5  |
|                                   |               |                      |                                                                   |            |
|                                   |               |                      |                                                                   |            |
| Moulding (total weight)           | 0.01 * XX     | 5%                   | 30% GF Nylon 6T                                                   |            |
| Containing:                       | 0.005 * XX    | 5%                   | Nylon 6T                                                          | 63428-83-1 |
|                                   | 0.003 * XX    | 5%                   | 30% Glass Fibre                                                   | 65997-17-3 |
|                                   | 0.0005 * XX   | 5%                   | Antimony Trioxide                                                 | 1309-64-4  |
|                                   | 0.0015 * XX   | 5%                   | Other Brominated Flame Retardants<br>[ISO 1043-4 Code No: FR(17)] |            |
|                                   |               |                      |                                                                   |            |
| Pick and Place Cap (total weight) | 0.1 * XX      | 5%                   | 30% GF Nylon 6T                                                   |            |
| Containing:                       | 0.05 * XX     | 5%                   | Nylon 6T                                                          | 63428-83-1 |
|                                   | 0.03 * XX     | 5%                   | 30% Glass Fibre                                                   | 65997-17-3 |
|                                   | 0.005 * XX    | 5%                   | Antimony Trioxide                                                 | 1309-64-4  |
|                                   | 0.015 * XX    | 5%                   | Other Brominated Flame Retardants<br>[ISO 1043-4 Code No: FR(17)] |            |
|                                   |               |                      |                                                                   |            |

Prepared by: *M. J. Perry*

Martin J Perry, BSc(Eng) MSc CEng MIET  
Compliance Specialist  
ComplianceTeam@harwin.co.uk

On behalf of:

**HARWIN**