# Material Declaration for M80-681XXXX

| Product Information | |
|---|---|
| Part Number: | M80-681XX01 |
| Part Description: | 2mm Female SMT Datamate |
| Part Weight (g): | (0.0722 * XX) + 0.0332 |

| Process Data | |
|---|---|
| Peak Reflow (Deg. C) | 235°C for 5 seconds |
| Termination Finish | 90/10 Tin/Lead over Nickel/Copper |
| RoHS Compliant? (Y/N) | No |

Note: RoHS compliant by threshold values, lead intentionally added, not recommended for Lead-Free Soldering.

| Homogeneous Material Location | Weight (g) | Tolerance | Substance Name | CAS # |
|---|---|---|---|---|
| Contact Shell - Brass | 0.0279 * XX | 2% | Copper | 7440-50-8 |
| | 0.0187 * XX | 1% | Zinc | 7440-66-6 |
| | 0.00161 * XX | 0.5% | Lead | 7439-92-1 |
| | 0 | (0.000144 * XX)g max | Iron (impurity only) | 7439-89-6 |
| | 0 | (0.000144 * XX)g max | Tin (impurity only) | 7440-31-5 |
| | 0 | (0.000144 * XX)g max | Nickel (impurity only) | 7440-02-0 |
| | 0 | (0.000024 * XX)g max | Aluminium (impurity only) | 7429-90-5 |
| | 0 | (0.00024 * XX)g max | Other Impurities | |
| Contact Shell - Plating | 0.000948 * XX | 5% | Tin | 7440-31-5 |
| | 0.000163 * XX | 5% | Lead | 7439-92-1 |
| | 0.000482 * XX | 10% | Nickel | 7440-02-0 |
| | 0.000321 * XX | 10% | Copper | 7440-50-8 |
| | | | | |
| Contact Clip - Beryllium Copper | 0.00207 * XX | 1% | Copper | 7440-50-8 |
| | 0.00004 * XX | 0.5% | Beryllium | 7440-41-7 |
| | 0 | (0.000006 * XX)g max | Nickel (impurity only) | 7440-02-0 |
| | 0 | (0.000006 * XX)g max | Cobalt (impurity only) | 7440-48-4 |
| | 0 | (0.000004 * XX)g max | Iron (impurity only) | 7439-89-6 |
| | 0 | (0.000004 * XX)g max | Aluminium (impurity only) | 7429-90-5 |
| | 0 | (0.000004 * XX)g max | Silicon (impurity only) | 7440-21-3 |
| | 0 | (0.000011 * XX)g max | Other Impurities | |
| Contact Clip - Plating | 0.000057 * XX | 10% | Nickel | 7440-02-0 |
| | 0.000006 * XX | 5% | Gold | 7440-57-5 |
| | | | | |
| Moulding (total weight) | (0.0201 * XX) + 0.0332 | 5% | 30% GF PA46 | 50327-22-5 |
| Containing: | (0.0101 * XX) + 0.0166 | 10% | PA46 | 50327-22-5 |
| | (0.00603 * XX) + 0.00996 | 5% | Glass Fibre | 65997-17-3 |
| | (0.00101 * XX) + 0.00166 | 5% | Antimony Trioxide | 1309-64-4 |
| | (0.00302 * XX) + 0.00498 | 5% | Other Brominated Flame Retardants [ISO 1043-4 Code No: FR(17)] | |
| | | | | |

# Material Declaration for M80-681XXXX

| Product Information | |
|---|---|
| Part Number: | M80-681XX42 |
| Part Description: | 2mm Female SMT Datamate |
| Part Weight (g): | (0.0722 * XX) + 0.0332 |

| Process Data | |
|---|---|
| Peak Reflow (Deg. C) | 260°C for 10 seconds |
| Termination Finish | 100% Tin over Nickel/Copper |
| 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 Shell - Brass | 0.0279 * XX | 2% | Copper | 7440-50-8 |
| | 0.0187 * XX | 1% | Zinc | 7440-66-6 |
| | 0.00161 * XX | 0.5% | Lead | 7439-92-1 |
| | 0 | (0.000144 * XX)g max | Iron (impurity only) | 7439-89-6 |
| | 0 | (0.000144 * XX)g max | Tin (impurity only) | 7440-31-5 |
| | 0 | (0.000144 * XX)g max | Nickel (impurity only) | 7440-02-0 |
| | 0 | (0.000024 * XX)g max | Aluminium (impurity only) | 7429-90-5 |
| | 0 | (0.00024 * XX)g max | Other Impurities | |
| Contact Shell - Plating | 0.00105 * XX | 5% | Tin | 7440-31-5 |
| | 0.000482 * XX | 10% | Nickel | 7440-02-0 |
| | 0.000321 * XX | 10% | Copper | 7440-50-8 |
| | | | | |
| Contact Clip - Beryllium Copper | 0.00207 * XX | 1% | Copper | 7440-50-8 |
| | 0.00004 * XX | 0.5% | Beryllium | 7440-41-7 |
| | 0 | (0.000006 * XX)g max | Nickel (impurity only) | 7440-02-0 |
| | 0 | (0.000006 * XX)g max | Cobalt (impurity only) | 7440-48-4 |
| | 0 | (0.000004 * XX)g max | Iron (impurity only) | 7439-89-6 |
| | 0 | (0.000004 * XX)g max | Aluminium (impurity only) | 7429-90-5 |
| | 0 | (0.000004 * XX)g max | Silicon (impurity only) | 7440-21-3 |
| | 0 | (0.000011 * XX)g max | Other Impurities | |
| Contact Clip - Plating | 0.000057 * XX | 10% | Nickel | 7440-02-0 |
| | 0.000006 * XX | 5% | Gold | 7440-57-5 |
| | | | | |
| Moulding (total weight) | (0.0201 * XX) + 0.0332 | 5% | 30% GF PA46 | |
| Containing: | (0.0101 * XX) + 0.0166 | 10% | PA46 | 50327-22-5 |
| | (0.00603 * XX) + 0.00996 | 5% | Glass Fibre | 65997-17-3 |
| | (0.00101 * XX) + 0.00166 | 5% | Antimony Trioxide | 1309-64-4 |
| | (0.00302 * XX) + 0.00498 | 5% | Other Brominated Flame Retardants [ISO 1043-4 Code No: FR(17)] | |
| | | | | |

# Material Declaration for M80-681XXXX

| Product Information | |
|---|---|
| Part Number: | M80-681XX45 |
| Part Description: | 2mm Female SMT Datamate |
| Part Weight (g): | (0.0713 * XX) + 0.0332 |

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

| Homogeneous Material Location | Weight (g) | Tolerance | Substance Name | CAS # |
|---|---|---|---|---|
| Contact Shell - Brass | 0.0279 * XX | 2% | Copper | 7440-50-8 |
| | 0.0187 * XX | 1% | Zinc | 7440-66-6 |
| | 0.00161 * XX | 0.5% | Lead | 7439-92-1 |
| | 0 | (0.000144 * XX)g max | Iron (impurity only) | 7439-89-6 |
| | 0 | (0.000144 * XX)g max | Tin (impurity only) | 7440-31-5 |
| | 0 | (0.000144 * XX)g max | Nickel (impurity only) | 7440-02-0 |
| | 0 | (0.000024 * XX)g max | Aluminium (impurity only) | 7429-90-5 |
| | 0 | (0.00024 * XX)g max | Other Impurities | |
| Contact Shell - Plating | 0.000195 * XX | 5% | Gold | 7440-57-5 |
| | 0.000482 * XX | 10% | Nickel | 7440-02-0 |
| | 0.000402 * XX | 10% | Copper | 7440-50-8 |
| | | | | |
| Contact Clip - Beryllium Copper | 0.00207 * XX | 1% | Copper | 7440-50-8 |
| | 0.00004 * XX | 0.5% | Beryllium | 7440-41-7 |
| | 0 | (0.000006 * XX)g max | Nickel (impurity only) | 7440-02-0 |
| | 0 | (0.000006 * XX)g max | Cobalt (impurity only) | 7440-48-4 |
| | 0 | (0.000004 * XX)g max | Iron (impurity only) | 7439-89-6 |
| | 0 | (0.000004 * XX)g max | Aluminium (impurity only) | 7429-90-5 |
| | 0 | (0.000004 * XX)g max | Silicon (impurity only) | 7440-21-3 |
| | 0 | (0.000011 * XX)g max | Other Impurities | |
| Contact Clip - Plating | 0.000057 * XX | 10% | Nickel | 7440-02-0 |
| | 0.000006 * XX | 5% | Gold | 7440-57-5 |
| | | | | |
| Moulding (total weight) | (0.0201 * XX) + 0.0332 | 5% | 30% GF PA46 | |
| Containing: | (0.0101 * XX) + 0.0166 | 10% | PA46 | 50327-22-5 |
| | (0.00603 * XX) + 0.00996 | 5% | Glass Fibre | 65997-17-3 |
| | (0.00101 * XX) + 0.00166 | 5% | Antimony Trioxide | 1309-64-4 |
| | (0.00302 * XX) + 0.00498 | 5% | Other Brominated Flame Retardants [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