

## Material Declaration for M80-405XXXX

Product Information	
Part Number:	M80-405XX01
Part Description:	2mm Vertical Female Datamate
Part Weight (g):	(0.0694 * XX) + 1.128
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	0.0244 * XX	2%	Copper	7440-50-8	
	0.0164 * XX	1%	Zinc	7440-66-6	
	0.00126 * XX	0.5%	Lead	7439-92-1	
	0	(0.000126 * XX)g max	Iron (impurity only)	7439-89-6	
	0	(0.000126 * XX)g max	Tin (impurity only)	7440-31-5	
Contact Shell - Plating	0	(0.000126 * XX)g max	Nickel (impurity only)	7440-02-0	
	0	(0.000021 * XX)g max	Aluminium (impurity only)	7429-90-5	
	0	(0.00021 * XX)g max	Other Impurities		
	0.000876 * XX	5%	Tin	7440-31-5	
	0.000151 * XX	5%	Lead	7439-92-1	
Contact Clip - Beryllium Copper	0.000445 * XX	10%	Nickel	7440-02-0	
	0.000297 * XX	10%	Copper	7440-50-8	
	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	
Contact Clip - Plating	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		
	0.000057 * XX	10%	Nickel	7440-02-0	
	0.000006 * XX	5%	Gold	7440-57-5	
	Jackscrews - Stainless Steel	0.391	10%	Iron	7439-89-6
		0	0.000644g max	Carbon (impurity only)	7440-44-0
		0	0.00537g max	Silicon (impurity only)	7440-21-3
0		0.0107g max	Manganese (impurity only)	7439-96-5	
0		0.000322g max	Phosphorus (impurity only)	7723-14-0	
0.0966		4%	Chromium (Metallic)	7440-47-3	
0.00134		0.5%	Sulphur	7704-34-9	
0.0483		4%	Nickel	7440-02-0	
0		0.00537g max	Molybdenum (impurity only)	7439-98-7	
0		0.00107g max	Niobium (impurity only)	7440-03-1	
0		0.000536g max	Titanium (impurity only)	7440-32-6	
0.00376		0.8%	Copper	7440-50-8	
Jackscrew Nuts - Stainless Steel		0.32	10%	Iron	7439-89-6
	0	0.000528g max	Carbon (impurity only)	7440-44-0	
	0	0.0044g max	Silicon (impurity only)	7440-21-3	
	0	0.00881g max	Manganese (impurity only)	7439-96-5	
	0	0.000264g max	Phosphorus (impurity only)	7723-14-0	
	0.0793	4%	Chromium (Metallic)	7440-47-3	
	0.0011	0.5%	Sulphur	7704-34-9	
	0.0396	4%	Nickel	7440-02-0	
	0	0.0044g max	Molybdenum (impurity only)	7439-98-7	
	0	0.00088g max	Niobium (impurity only)	7440-03-1	
	0	0.00044g max	Titanium (impurity only)	7440-32-6	
	0.00308	0.8%	Copper	7440-50-8	
	Moulding (total weight)	(0.0234 * XX) + 0.144	10%	30% Glass-Filled PPS	
(0.0164 * XX) + 0.101		10%	PPS	26125-40-6	
(0.00702 * XX) + 0.0432		10%	30% Glass Fibre	65997-17-3	
Does not contain:			Antimony		
			Other Brominated Flame Retardants		

## Material Declaration for M80-405XXXX

Product Information	
Part Number:	M80-405XX05
Part Description:	2mm Vertical Female Datamate
Part Weight (g):	(0.0686 * XX) + 1.128
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	0.0244 * XX	2%	Copper	7440-50-8	
	0.0164 * XX	1%	Zinc	7440-66-6	
	0.00126 * XX	0.5%	Lead	7439-92-1	
	0	(0.000126 * XX)g max	Iron (impurity only)	7439-89-6	
	0	(0.000126 * XX)g max	Tin (impurity only)	7440-31-5	
	0	(0.000126 * XX)g max	Nickel (impurity only)	7440-02-0	
	0	(0.000021 * XX)g max	Aluminium (impurity only)	7429-90-5	
	0	(0.00021 * XX)g max	Other Impurities		
	Contact Shell - Plating	0.00018 * XX	5%	Gold	7440-57-5
		0.000445 * XX	10%	Nickel	7440-02-0
0.000371 * 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
Jackscrews - Stainless Steel	0.391	10%	Iron	7439-89-6	
	0	0.000644g max	Carbon (impurity only)	7440-44-0	
	0	0.00537g max	Silicon (impurity only)	7440-21-3	
	0	0.0107g max	Manganese (impurity only)	7439-96-5	
	0	0.000322g max	Phosphorus (impurity only)	7723-14-0	
	0.0966	4%	Chromium (Metallic)	7440-47-3	
	0.00134	0.5%	Sulphur	7704-34-9	
	0.0483	4%	Nickel	7440-02-0	
	0	0.00537g max	Molybdenum (impurity only)	7439-98-7	
	0	0.00107g max	Niobium (impurity only)	7440-03-1	
	0	0.000536g max	Titanium (impurity only)	7440-32-6	
	0.00376	0.8%	Copper	7440-50-8	
	Jackscrew Nuts - Stainless Steel	0.32	10%	Iron	7439-89-6
		0	0.000528g max	Carbon (impurity only)	7440-44-0
0		0.0044g max	Silicon (impurity only)	7440-21-3	
0		0.00881g max	Manganese (impurity only)	7439-96-5	
0		0.000264g max	Phosphorus (impurity only)	7723-14-0	
0.0793		4%	Chromium (Metallic)	7440-47-3	
0.0011		0.5%	Sulphur	7704-34-9	
0.0396		4%	Nickel	7440-02-0	
0		0.0044g max	Molybdenum (impurity only)	7439-98-7	
0		0.00088g max	Niobium (impurity only)	7440-03-1	
0		0.00044g max	Titanium (impurity only)	7440-32-6	
0.00308		0.8%	Copper	7440-50-8	
Moulding (total weight)		(0.0234 * XX) + 0.144	10%	30% Glass-Filled PPS	
		Containing:	(0.0164 * XX) + 0.101	10%	PPS
	(0.00702 * XX) + 0.0432	10%	30% Glass Fibre	65997-17-3	
Does not contain:			Antimony		
			Other Brominated Flame Retardants		

## Material Declaration for M80-405XXXX

Product Information	
Part Number:	M80-405XX42
Part Description:	2mm Vertical Female Datamate
Part Weight (g):	(0.0693 * XX) + 1.128
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 Shell - Brass	0.0244 * XX	2%	Copper	7440-50-8	
	0.0164 * XX	1%	Zinc	7440-66-6	
	0.00126 * XX	0.5%	Lead	7439-92-1	
	0	(0.000126 * XX)g max	Iron (impurity only)	7439-89-6	
	0	(0.000126 * XX)g max	Tin (impurity only)	7440-31-5	
Contact Shell - Plating	0	(0.000126 * XX)g max	Nickel (impurity only)	7440-02-0	
	0	(0.000021 * XX)g max	Aluminium (impurity only)	7429-90-5	
	0	(0.00021 * XX)g max	Other Impurities		
	0.000973 * XX	5%	Tin	7440-31-5	
	0.000445 * XX	10%	Nickel	7440-02-0	
Contact Shell - Plating	0.000297 * XX	10%	Copper	7440-50-8	
	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	
Contact Clip - Beryllium Copper	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		
	0.000057 * XX	10%	Nickel	7440-02-0	
Contact Clip - Plating	0.000006 * XX	5%	Gold	7440-57-5	
	0.391	10%	Iron	7439-89-6	
	0	0.000644g max	Carbon (impurity only)	7440-44-0	
	0	0.00537g max	Silicon (impurity only)	7440-21-3	
	0	0.0107g max	Manganese (impurity only)	7439-96-5	
Jackscrews - Stainless Steel	0	0.000322g max	Phosphorus (impurity only)	7723-14-0	
	0.0966	4%	Chromium (Metallic)	7440-47-3	
	0.00134	0.5%	Sulphur	7704-34-9	
	0.0483	4%	Nickel	7440-02-0	
	0	0.00537g max	Molybdenum (impurity only)	7439-98-7	
	0	0.00107g max	Niobium (impurity only)	7440-03-1	
	0	0.000536g max	Titanium (impurity only)	7440-32-6	
	0.00376	0.8%	Copper	7440-50-8	
	0.32	10%	Iron	7439-89-6	
	0	0.000528g max	Carbon (impurity only)	7440-44-0	
Jackscrew Nuts - Stainless Steel	0	0.0044g max	Silicon (impurity only)	7440-21-3	
	0	0.00881g max	Manganese (impurity only)	7439-96-5	
	0	0.000264g max	Phosphorus (impurity only)	7723-14-0	
	0.0793	4%	Chromium (Metallic)	7440-47-3	
	0.0011	0.5%	Sulphur	7704-34-9	
	0.0396	4%	Nickel	7440-02-0	
	0	0.0044g max	Molybdenum (impurity only)	7439-98-7	
	0	0.00088g max	Niobium (impurity only)	7440-03-1	
	0	0.00044g max	Titanium (impurity only)	7440-32-6	
	0.00308	0.8%	Copper	7440-50-8	
Moulding (total weight)	(0.0234 * XX) + 0.144	10%	30% Glass-Filled PPS		
	Containing:	(0.0164 * XX) + 0.101	10%	PPS	26125-40-6
	(0.00702 * XX) + 0.0432	10%	30% Glass Fibre	65997-17-3	
Does not contain:			Antimony		
			Other Brominated Flame Retardants		

Prepared by: *M. J. Perry*

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

On behalf of: **HARWIN**