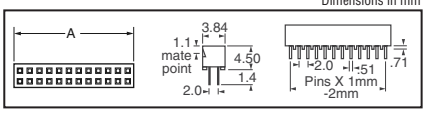
3M 2mm x 2mm Vertical Socket

Dimensions in mm



Features:

• High temperature dielectric • IR, vapor and wave solder compatible • Available in thru hole • Industry standard compatible • Minimizes PC board stacking heights • End stackable feature • Side stackable feature

Physical Specifications: • **Insulation Material:** High Temperature Glass Filled Polyester (PCT) • **Color:** Natural • **Marking:** Molded orientation delta • **Contact Material:** Beryllium copper • **Contact Plating:** • Wiping area: 30µ" gold plate • Solder Tails: 100µ" 90/10 SnPb plate • Underplate: 50µ" nickel

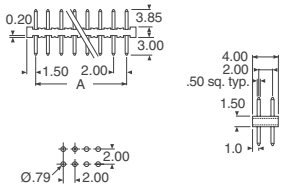
Electrical Specifications: • Current Rating: 1.5 Amp • Insulation Resistance: 5000MΩ @ 250 Volts minimum • Withstanding Voltage: 500VDC @ Sea level

Environmental Specifications: • Operating Temperature: -55°C ~ 105°C

No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	100	500	3M Part No.
Socket Vertical PC Mount						
8	.310 (7.87)	3M1008-ND	1.91	1.46	1.32	150208-6002-TB
10	.389 (9.88)	3M1010-ND	2.00	1.52	1.38	150210-6002-TB
12	.467 (11.86)	3M1012-ND	2.06	1.57	1.42	150212-6002-TB
20	.782 (19.86)	3M1020-ND	2.35	1.79	1.62	150220-6002-TB
24	.940 (23.88)	3M1024-ND	2.50	1.90	1.72	150224-6002-TB
30	1.176 (29.87)	3M1030-ND	2.70	2.06	1.86	150230-6002-TB
40	1.570 (39.88)	3M1040-ND	3.06	2.33	2.11	150240-6002-TB
44	1.727 (43.87)	3M1044-ND	3.20	2.44	2.21	150244-6002-TB
50	1.964 (49.88)	3M1050-ND	3.41	2.60	2.35	150250-6002-TB
60	2.357 (59.87)	3M1060-ND	3.79	2.88	2.61	150260-6002-TB

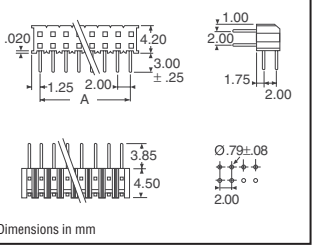
2mm x 2mm Pin Strip Headers

Dual Row – Straight Header



Dimensions in mm

Dual Row – Right Angle Header



Dimensions in mm

Features: • Industry standard compatible • High temperature dielectric • IR, vapor and wave solder compatible • Straight Solder Tail • Maximizes use of PC board space • Mates with boardmount and wiremount products • End stackable feature • Side stackable feature

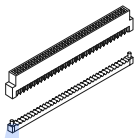
Physical Specifications: • **Contact Plating:** • Wiping area: Gold - MIL-G-45204, Type II, Grade C • Solder Tails: 200µ" 90/10 Tin Lead - MIL-P-81728 • Underplate: 100µ" nickel - QQ-N-290, Class 2 • **Contact Material:** Copper Alloy • **Insulation Material:** • Right Angle: Glass Filled Polyester (PCT) • Straight: Liquid Crystal Polymer (LCP) • Flammability: UL 94V-0 • **Color:** • Natural

Electrical Specifications: • Current Rating: 1.5Amp • Insulation Resistance: >5x10⁸ Ω @ 250VDC • Withstanding Voltage: 500VDC @ Sea level

Environmental Specifications: • Operating Temperature: -55°C ~ 105°C

No. of Pos.	Dim. A Inch (mm)	Digi-Key Part No.	Price Each 1	100	500	3M Part No.
Dual Row Straight Header						
8	.295 (7.49)	3M1108-ND	.96	.73	.66	151208-8422-TB
10	.374 (9.50)	3M1110-ND	1.56	1.19	1.08	151210-8422-TB
12	.453 (11.51)	3M1112-ND	1.16	.89	.81	151212-8422-TB
20	.768 (19.51)	3M1120-ND	1.56	1.19	1.08	151220-8422-TB
24	.925 (23.50)	3M1124-ND	1.79	1.36	1.23	151224-8422-TB
30	1.162 (29.51)	3M1130-ND	2.06	1.57	1.42	151230-8422-TB
40	1.556 (39.52)	3M1140-ND	2.45	1.87	1.69	151240-8422-TB
44	1.714 (43.54)	3M1144-ND	2.64	2.01	1.82	151244-8422-TB
50	1.950 (49.53)	3M1150-ND	2.91	2.22	2.01	151250-8422-TB
60	2.344 (59.54)	3M1160-ND	3.37	2.56	2.32	151260-8422-TB
Dual Row Right Angle Header						
8	.295 (7.49)	3M1208-ND	.62	.48	.43	151208-7422-TB
10	.374 (9.50)	3M1210-ND	.71	.54	.49	151210-7422-TB
12	.453 (11.51)	3M1212-ND	.77	.59	.53	151212-7422-TB
20	.768 (19.51)	3M1220-ND	1.04	.79	.72	151220-7422-TB
24	.925 (23.50)	3M1224-ND	1.21	.92	.83	151224-7422-TB
30	1.162 (29.51)	3M1230-ND	1.39	1.06	.96	151230-7422-TB
40	1.556 (39.52)	3M1240-ND	1.87	1.43	1.29	151240-7422-TB
44	1.714 (43.54)	3M1244-ND	2.00	1.52	1.38	151244-7422-TB
50	1.950 (49.53)	3M1250-ND	2.18	1.66	1.51	151250-7422-TB
60	2.344 (59.54)	3M1260-ND	2.50	1.90	1.72	151260-7422-TB

3M 2mm Wiremount Socket



2mm Wiremount Socket – 1mm Pitch Cable

Features: • Industry standard compatible • Mates with 2.0mm x 2.0mm grid pin strips • Low profile • Preassembled covers • Available with and without strain relief

Physical Specifications: • **Insulation Material:** Glass Filled Polyester (PBT), Flammability: UL94 V-0 • **Color:** Gray • **Contact Material:** Beryllium copper • **Contact Plating:** • Underplate and U-slot: 50-150µ" Nickel, QQ-N-290, Class 2 • Wiping area: Gold Mil-G-45204, Type II, Grade C • **Marking:** Orientation triangle and 3M logo

Electrical Specifications: • Current Rating: 1 Amp • Insulation Resistance: >1x10Ω at 500VDC • Withstanding Voltage: 1000Vrms at Sea Level

Environmental Specifications: • Operating Temperature Rating: -55°C ~ 105°C **Rating:** UL File No. E86982, CSA File No. LR#48869

1.0mm Round Conductor Flat Cable – 28AWG Stranded, PVC

Features: • Close spacing permits high signal density • 28AWG wire on 1.0mm centers permits mass termination to 2.0mm connectors • Zippable for branching or discrete termination • Stranded wire provides flexibility and extended product life

Physical Specifications: • Insulation Material: Polyvinyl Chloride (PVC) • Color: Gray • Marking: Red Edge • Conductors: 28AWG, 7 x 36 Tinned Stranded Copper

Electrical Specifications: • Voltage Rating: 300V • Insulation Resistance: >1 x 10¹⁰Ω/3m (10 feet) • Characteristic Impedance: 92Ω Unbalanced, 146Ω Balanced • Capacitance: 55.50 pF/m Unbalanced, 32.77 pF/m Balanced • Inductance: 0.47µH/m Unbalanced, 0.70µH/m Balanced • Propagation Delay: 4.95ns/m Unbalanced, 4.78ns/m Balanced

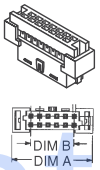
Environmental Specifications: • Temperature Rating Operating: -20°C ~ 105°C • Flammability Rating: UL: VW-1, CSA: FT1 **Rating:** UL File No. E42769, Style 2651 CSA File No. LL 53649 (optional) • RoHS Compliant

No. of Pos.	Digi-Key Part No.	Price Each 1	100	500	3M Part No.
IDC Socket Gold					
10	MSA10A-ND	3.14	2.39	2.12	152210-0100-GB
12	MSA12A-ND	3.18	2.42	2.19	152212-0100-GB
44	MSA44A-ND	4.49	3.42	3.09	152244-0100-GB
50	MSA50A-ND	4.58	3.48	3.15	152250-0100-GB
IDC Socket Gold with Strain Relief					
10	MSE10A-ND	3.64	2.77	2.51	152210-0103-GB
12	MSE12A-ND	3.83	2.91	2.64	152212-0103-GB
44	MSE44A-ND	5.05	3.84	3.48	152244-0103-GB
50	MSE50A-ND	5.14	3.91	3.54	152250-0103-GB

No. of Pos.	(NOTE: "X" in Part No. Represents No. of Meters) Digi-Key Part No.	Price Per Meters 5	10	25	50	100	3M Part No.
Ribbon Cable Gray							
10	MC10L-X-ND	7.08	13.14	29.32	50.55	80.88	3625/10 100M
12	MC12L-X-ND	8.49	15.77	35.18	60.66	97.06	3625/12 100M
44	MC44L-X-ND	31.14	57.83	129.01	222.43	355.88	3625/44 100M
50	MC50L-X-ND	35.39	65.72	146.60	252.75	404.40	3625/50 100M

100m reel quantity may contain splices. Splice position will be marked on the reel.

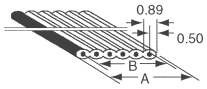
molex Waldom ELECTRONICS 2mm Cable-to-Board Receptacle - "Lead Free"



UL2651, UL2678 **UL File No:** E29179 CSA **File No:** LR19980 **Mates With:** Milli-Grid 2.00mm Headers ***Electrical:*** **Voltage:** 125VDC **Current:** 1.0A **Contact Res.:** 30mΩ maximum **Dielectric Withstanding Volt.:** 500VAC **Insulation Res.:** 5000MΩ minimum ***Physical:*** **Housing:** High Thermoplastic, UL 94V-0 **Contact:** Copper Alloy **Plating Contact Area:** (15µ") Gold **Operating Temperature:** -20°C ~ 85°C **Cable:** 1.00mm Flat Cable, 7 Strands, 28 AWG

No. of Pos.	Dim. (mm) A	B	Digi-Key Part No.	Price Each 1	10	25	Molex Part No.
Dual Row, IDT w/out Polarization and Locking Ramp							
10	16.65	8.00	WM14210-ND	2.95	2.37	1.97	87568-1063
12	18.65	10.00	WM14212-ND	3.20	2.57	2.14	87568-1263
14	20.65	12.00	WM14214-ND	3.69	2.96	2.47	87568-1463
16	22.65	14.00	WM14216-ND	3.96	3.17	2.64	87568-1663
20	26.65	18.00	WM14220-ND	4.12	3.30	2.75	87568-2063
22	28.65	20.00	WM14222-ND	4.53	3.63	3.03	87568-2263
24	30.65	22.00	WM14224-ND	4.94	3.96	3.30	87568-2463
26	32.65	24.00	WM14226-ND	5.04	4.03	3.36	87568-2663
30	36.65	28.00	WM14230-ND	5.45	4.36	3.64	87568-3063
34	40.65	32.00	WM14234-ND	5.61	4.49	3.74	87568-3463
40	46.65	38.00	WM14240-ND	6.19	4.96	4.13	87568-4063
44	50.65	42.00	WM14244-ND	6.35	5.08	4.24	87568-4463
50	56.65	48.00	WM14250-ND	7.00	5.61	4.67	87568-5063
Dual Row, IDT with Single Locking Ramp							
10	16.65	8.00	WM14310-ND	2.72	2.18	1.82	87568-1073
12	18.65	10.00	WM14312-ND	3.20	2.57	2.14	87568-1273
Dual Row, IDT with Polarization and Locking Ramp							
14	20.65	12.00	WM14314-ND	3.69	2.96	2.47	87568-1493
16	22.65	14.00	WM14316-ND	3.96	3.17	2.64	87568-1693
20	26.65	18.00	WM14320-ND	4.12	3.30	2.75	87568-2093
22	28.65	20.00	WM14322-ND	4.53	3.63	3.03	87568-2293
24	30.65	22.00	WM14324-ND	4.94	3.96	3.30	87568-2493
26	32.65	24.00	WM14326-ND	5.04	4.03	3.36	87568-2693
30	36.65	28.00	WM14330-ND	5.32	4.26	3.55	87568-3093
34	40.65	32.00	WM14334-ND	5.61	4.49	3.74	87568-3493
40	46.65	38.00	WM14340-ND	6.19	4.96	4.13	87568-4093
44	50.65	42.00	WM14344-ND	6.00	4.80	4.00	87568-4493
50	56.65	48.00	WM14350-ND	7.12	5.70	4.75	87568-5093

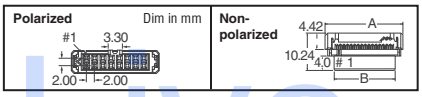
1mm Round Conductor Flat Cable



UL File No: E61522, UL Style No. 2678 **CSA File No:** LL61126 **Electrical: Voltage:** 150V **Physical: Flammability:** VW-1 **Operating Temperature:** -20°C ~ 105°C **Insulation:** Gray PVC **Edge Mark:** Black, 28AWG Stranded, Tinned

Cir-cuits	Dim. (mm) A	B	(NOTE: "X" in Part No. Represents No. of Feet) Digi-Key Part No.	Price Per Feet 5	10	25	50	100
10	10.00	9.00	WM11-X-ND	4.38	8.24	18.02	30.89	51.48
20	20.00	19.00	WM12-X-ND	7.42	13.96	30.55	52.36	87.27
24	24.00	23.00	WM13-X-ND	8.90	16.75	36.64	62.82	104.69
40	40.00	39.00	WM14-X-ND	16.39	30.85	67.49	115.70	192.83
44	44.00	43.00	WM15-X-ND	18.03	33.94	74.25	127.28	212.14
50	50.00	49.00	WM16-X-ND	18.63	35.06	76.70	131.48	219.14

tyco Electronics AMP 2mm Ribbon Connectors



The new 2.0 (.079) AMP-LATCH® receptacle connector family features contacts on a true 2.0 x 2.0 (.079 x .079) mating grid for 1.0 (.039) pitch ribbon. These receptacles feature insulation displacement contacts (IDC) with a top/bottom single beam contact orientation. Contacts are beryllium copper, duplex plated 30µ" gold in the mating area and 100µ" minimum tin-lead on termination end all over 50µ" nickel underplating. Contact mating area is 1.54 (.061) from the face of the housing and they accept 0.50mm (.0197) round or square posts.

Product Facts: • True hard metric 2.0 x 2.0 mating grid for 1.0 pitch ribbon cable • IDC, beryllium copper contacts, duplex plated gold-over-nickel • U.L. 94V-0 rated thermoplastic components

Performance Data: • Durability: 150 cycles • Termination Resistance: 25mΩ maximum • Mating Force: 1.67N maximum • Unmating Force: 0.14N minimum • Operating Temperature: -65°C ~ 105°C

No. of Pos.	Dimensions A	B	Digi-Key Part No.	Price Each 1	25	AMP Part No.
Receptacle — Feed Thru Cover Polarized						
10	15.16	10.41	AKA10K-ND	2.36	1.48	111623-1
14	19.18	14.40	AKA14K-ND	2.41	1.52	111623-2
16	21.18	16.41	AKA16K-ND	2.79	1.75	111623-3
20	25.17	20.40	AKA20K-ND	2.57	1.61	111623-4
24	29.18	24.41	AKA24K-ND	4.57	2.87	111623-5
26	31.17	26.42	AKA26K-ND	2.99	1.88	111623-6
30	35.18	30.40	AKA30K-ND	3.04	1.91	111623-7
40	45.19	40.41	AKA40K-ND	3.73	2.34	111623-9
44	49.17	44.40	AKA44K-ND	3.63	2.28	1-111623-0
50	55.17	50.39	AKA50K-ND	3.85	2.41	1-111623-1
Receptacle — Feed Thru Cover Non-Polarized						
8	13.18	8.41	ASA08K-ND	2.72	1.71	1-111626-6
10	15.16	10.41	ASA10K-ND	2.66	1.67	111626-1
14	19.18	14.40	ASA14K-ND	2.75	1.73	111626-2
16	21.18	16.41	ASA16K-ND	5.99	3.76	111626-3
20	25.17	20.40	ASA20K-ND	2.54	1.60	111626-4
26	31.17	26.42	ASA26K-ND	4.67	2.93	111626-6
40	45.19	40.41	ASA40K-ND	3.69	2.32	1-111626-9
44	49.17	44.40	ASA44K-ND	3.63	2.28	1-111626-0
50	55.17	50.39	ASA50K-ND	3.96	2.49	1-111626-1
NEW! Receptacle - Feed Thru Cover Polarized NEW! RoHS Compliant						
10	15.16	10.41	AKA10L-ND	2.31	1.45	1-111623-8
14	19.18	14.40	AKA14L-ND	4.69	2.94	1-111623-9
16	21.18	16.41	AKA16L-ND	2.79	1.75	2-111623-0
20	25.17	20.40	AKA20L-ND	2.49	1.56	2-111623-1
24	29.18	24.41	AKA24L-ND	4.03	2.53	2-111623-7
26	31.17	26.42	AKA26L-ND	2.90	1.82	2-111623-2
30	35.18	30.40	AKA30L-ND	2.95	1.85	2-111623-3
40	45.19	40.14	AKA40L-ND	3.62	2.27	2-111623-4
44	49.17	44.40	AKA44L-ND	3.63	2.28	2-111623-5
50	55.17	50.39	AKA50L-ND	3.85	2.41	2-111623-6
NEW! Receptacle - Feed Thru Cover Non-Polarized RoHS Compliant						
8	13.18	8.41	ASA08L-ND	2.66	1.67	2-111626-4
10	15.16	10.41	ASA10L-ND	2.66	1.67	1-111626-7
14	19.18	14.40	ASA14L-ND	2.70	1.69	1-111626-8
16	21.18	16.41	ASA16L-ND	3.00	1.88	2-111626-5
20	25.17	20.40	ASA20L-ND	2.49	1.56	1-111626-9
26	31.17	26.42	ASA26L-ND	4.12	2.59	2-111626-7
40	45.19	40.41	ASA40L-ND	3.62	2.27	2-111626-1
44	49.17	44.40	ASA44L-ND	3.63	2.28	2-111626-2
50	55.17	50.39	ASA50L-ND	3.85	2.41	2-111626-3

Datasheet.live