

# 3M Low Profile Headers (Protected Headers)

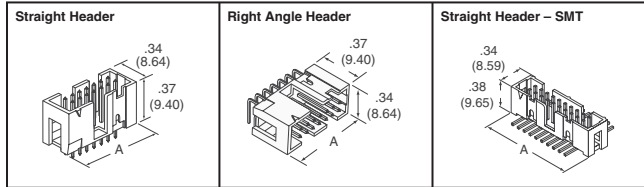


**PHYSICAL:**  
 • Flammability: UL 94V-0 • Marking: 3M logo, Part Identification Number and Orientation Triangle  
**ELECTRICAL:**  
 • Current Rating: 2A • Insulation Resistance: >1x10<sup>9</sup>Ω @ 500VDC • Withstanding Voltage: 1000VRMS at Sea Level  
**ENVIRONMENTAL:**  
 • Temperature Rating: -55°C - 105°C • UL File No.: E68080

**2500 Series Non-Compliant Specifications:**  
**Insulation:** • Material: Glass Filled Polyester (PBT) • Color: Gray • Contact Material: Phosphor Bronze (C510) **Plating:**  
 • Underplating: 100µ" Nickel-QQ-N-290, Class 2 • Wiping Area: Gold-MIL-G-45204, Type II, Grade C • Solder Tails: 200µ" 60/40 Tin Lead-MIL-P-81728 • CSA File No.: LR 40971

**2500 Series RoHS Compliant Specifications:**  
**Process Rating:** • 260°C Single pass (profile per J-STD-020C) **Insulation:** • Material: Glass Filled Polyester (PBT), Glass Filled Polyester (PCT) High Temperature option • Contact Material: Copper Alloy **Plating:** • Underplating: 100µ" (2.54µm) Nickel - Overall • Wiping Area: Gold • Solder Tails: 200µ" (5.08µm) Tin Lead or Matte Tin

**D2500 Series Specifications:**  
**Process Rating:** • 260°C Single pass (profile per J-STD-020C) **Insulation:** • Material: High Temperature Glass Filled Polyester (PCT) • Color: Black • Contact Material: Brass **Plating:** • Underplating: 50 - 100µ" Nickel • Wiping Area: 10µ" (0.25µm) Gold • Solder Tails: 40 - 120µ" (1 - 3µm) Matte Tin



No. of Contacts	Dimension A Inches (mm)	Digi-Key Part No.	1	Pricing 100	500	3M Part No.
<b>Straight Solder Tail, Gray PBT</b>						
10	0.788 (20.02)	MHB10K-ND	1.66	126.40	572.00	2510-6002UB
14	0.988 (25.10)	MHB14K-ND	1.73	131.14	593.45	2514-6002UB
16	1.088 (27.64)	MHB16K-ND	1.91	145.36	657.80	2516-6002UB
20	1.288 (32.72)	MHB20K-ND	2.00	151.68	686.40	2520-6002UB
24	1.488 (37.80)	MHB24K-ND	2.10	159.58	722.15	2524-6002UB

26	1.588 (40.34)	MHB26K-ND	2.14	162.74	736.45	2526-6002UB
30	1.788 (45.42)	MHB30K-ND	2.48	188.02	850.85	2530-6002UB
34	1.988 (50.50)	MHB34K-ND	2.56	194.34	879.45	2534-6002UB
40	2.288 (58.12)	MHB40K-ND	2.75	208.56	943.80	2540-6002UB
50	2.788 (70.82)	MHB50K-ND	3.41	259.12	1172.60	2550-6002UB
60	3.288 (83.52)	MHB60K-ND	4.08	309.68	1401.40	2560-6002UB

No. of Contacts	Dimension A Inches (mm)	Digi-Key Part No.	1	Pricing 100	500	3M Part No.
<b>NEW! Straight Solder Tail, Black PCT - 10µ" Gold - RoHS Compliant NEW!</b>						
10	.788 (20.02)	MHC10E-ND	.94	71.10	321.75	D2510-6002-AR
14	.988 (25.10)	MHC14E-ND	1.06	80.58	364.65	D2514-6002-AR
16	1.088 (27.64)	MHC16E-ND	1.19	90.06	407.55	D2516-6002-AR
20	1.288 (32.72)	MHC20E-ND	1.23	93.22	421.85	D2520-6002-AR
24	1.488 (37.80)	MHC24E-ND	1.31	99.54	450.45	D2524-6002-AR

26	1.588 (40.34)	MHC26E-ND	1.33	101.12	457.60	D2526-6002-AR
30	1.788 (45.42)	MHC30E-ND	1.54	116.92	529.10	D2530-6002-AR
34	1.988 (50.50)	MHC34E-ND	1.60	121.66	550.55	D2534-6002-AR
40	2.288 (58.12)	MHC40E-ND	1.71	129.56	586.30	D2540-6002-AR
50	2.788 (70.82)	MHC50E-ND	2.10	159.58	722.15	D2550-6002-AR

No. of Contacts	Dimension A Inches (mm)	Digi-Key Part No.	1	Pricing 100	500	3M Part No.
<b>Straight Solder Tail, Black PCT - 30µ" Gold - RoHS Compliant</b>						
10	0.788 (20.02)	MHC10K-ND	1.37	104.28	471.90	N2510-6002RB
14	0.988 (25.10)	MHC14K-ND	1.41	107.44	486.20	N2514-6002RB
16	1.088 (27.64)	MHC16K-ND	1.58	120.08	543.40	N2516-6002RB
20	1.288 (32.72)	MHC20K-ND	1.64	124.82	564.85	N2520-6002RB
24	1.488 (37.80)	MHC24K-ND	1.75	132.72	600.60	N2524-6002RB

26	1.588 (40.34)	MHC26K-ND	1.77	134.30	607.75	N2526-6002RB
30	1.788 (45.42)	MHC30K-ND	2.04	154.84	700.70	N2530-6002RB
34	1.988 (50.50)	MHC34K-ND	2.12	161.16	729.30	N2534-6002RB
40	2.288 (58.12)	MHC40K-ND	2.27	172.22	779.35	N2540-6002RB
50	2.788 (70.82)	MHC50K-ND	2.81	213.30	965.25	N2550-6002RB
60	3.288 (83.52)	MHC60K-ND	3.37	255.96	1158.30	N2560-6002RB
64	3.488 (88.60)	MHC64K-ND	3.58	271.76	1229.80	N2564-6002RB

No. of Contacts	Dimension A Inches (mm)	Digi-Key Part No.	1	Pricing 100	500	3M Part No.
<b>Right Angle Solder Tail, Gray PBT - 30µ" Gold</b>						
10	0.788 (20.02)	MHD10K-ND	1.83	139.04	629.20	2510-5002UB
14	0.988 (25.10)	MHD14K-ND	1.89	143.78	650.65	2514-5002UB
16	1.088 (27.64)	MHD16K-ND	2.10	159.58	722.15	2516-5002UB
20	1.288 (32.72)	MHD20K-ND	2.23	169.06	765.05	2520-5002UB
24	1.488 (37.80)	MHD24K-ND	2.31	175.38	793.65	2524-5002UB

26	1.588 (40.34)	MHD26K-ND	2.33	176.96	800.80	2526-5002UB
30	1.788 (45.42)	MHD30K-ND	3.18	241.74	1093.95	2530-5002UB
34	1.988 (50.50)	MHD34K-ND	2.79	211.72	958.10	2534-5002UB
40	2.288 (58.12)	MHD40K-ND	3.02	229.10	1036.75	2540-5002UB
50	2.788 (70.82)	MHD50K-ND	3.72	282.82	1279.85	2550-5002UB

No. of Contacts	Dimension A Inches (mm)	Digi-Key Part No.	1	Pricing 100	500	3M Part No.
<b>NEW! Right Angle Solder Tail, Black PCT - 10µ" Gold - RoHS Compliant NEW!</b>						
10	.788 (20.02)	MHE10E-ND	1.02	77.42	350.35	D2510-5002-AR
14	.988 (25.10)	MHE14E-ND	1.16	88.48	400.40	D2514-5002-AR
16	1.088 (27.64)	MHE16E-ND	1.31	99.54	450.45	D2516-5002-AR
20	1.288 (32.72)	MHE20E-ND	1.37	104.28	471.90	D2520-5002-AR
24	1.488 (37.80)	MHE24E-ND	1.44	109.02	493.35	D2524-5002-AR

26	1.588 (40.34)	MHE26E-ND	1.46	110.60	500.50	D2526-5002-AR
30	1.788 (45.42)	MHE30E-ND	1.98	150.10	679.25	D2530-5002-AR
34	1.988 (50.50)	MHE34E-ND	1.73	131.14	593.45	D2534-5002-AR
40	2.288 (58.12)	MHE40E-ND	1.87	142.20	643.50	D2540-5002-AR
50	2.788 (70.82)	MHE50E-ND	2.31	175.38	793.65	D2550-5002-AR

10	0.788 (20.02)	MHE10K-ND	1.52	115.34	521.95	N2510-5002RB
14	0.988 (25.10)	MHE14K-ND	1.56	118.50	536.25	N2514-5002RB
16	1.088 (27.64)	MHE16K-ND	1.75	132.72	600.60	N2516-5002RB
20	1.288 (32.72)	MHE20K-ND	1.83	139.04	629.20	N2520-5002RB
24	1.488 (37.80)	MHE24K-ND	1.91	145.36	657.80	N2524-5002RB

No. of Contacts	Dimension A Inches (mm)	Digi-Key Part No.	1	Pricing 100	500	3M Part No.
26	1.588 (40.34)	MHE26K-ND	1.93	146.94	664.95	N2526-5002RB
30	1.788 (45.42)	MHE30K-ND	2.62	199.08	900.90	N2530-5002RB
34	1.988 (50.50)	MHE34K-ND	2.31	175.38	793.65	N2534-5002RB
40	2.288 (58.12)	MHE40K-ND	2.50	189.60	858.00	N2540-5002RB
50	2.788 (70.82)	MHE50K-ND	3.08	233.84	1058.20	N2550-5002RB
60	3.288 (83.52)	MHE60K-ND	3.70	281.24	1272.70	N2560-5002RB
64	3.488 (88.60)	MHE64K-ND	3.95	300.20	1358.50	N2564-5002RB

No. of Contacts	Dimension A Inches (mm)	Digi-Key Part No.	1	Pricing 100	500	3M Part No.
<b>Straight, Black PCT, SMT - 30µ" Gold - RoHS Compliant</b>						
10	.788 (20.02)	MSH10KCT-ND	1.58	120.08	228.00	N2510-6VOC-RB-WD
14	.988 (25.10)	MSH14KCT-ND	1.62	123.24	234.00	N2514-6VOC-RB-WD
16	1.088 (27.64)	MSH16KCT-ND	1.79	135.88	258.00	N2516-6VOC-RB-WD
20	1.288 (32.72)	MSH20KCT-ND	1.85	140.62	267.00	N2520-6VOC-RB-WD
24	1.488 (37.80)	MSH24KCT-ND	1.96	148.52	282.00	N2524-6VOC-RB-WD

26	1.588 (40.34)	MSH26KCT-ND	1.98	150.10	285.00	N2526-6VOC-RB-WD
30	1.788 (45.42)	MSH30KCT-ND	2.25	170.64	324.00	N2530-6VOC-RB-WD
34	1.988 (50.50)	MSH34KCT-ND	2.33	176.96	336.00	N2534-6VOC-RB-WD
40	2.288 (58.12)	MSH40KCT-ND	2.48	188.02	357.00	N2540-6VOC-RB-WD
50	2.788 (70.82)	MSH50KCT-ND	3.02	229.10	435.00	N2550-6VOC-RB-WD
60	3.288 (83.52)	MSH60KCT-ND	3.58	271.76	516.00	N2560-6VOC-RB-WD
64	3.488 (88.60)	MSH64KCT-ND	3.79	287.56	546.00	N2564-6VOC-RB-WD

No. of Contacts	Dimension A Inches (mm)	Digi-Key Part No.	1	Pricing 100	500	3M Part No.
<b>NEW! Straight, Black PCT, SMT - 10µ" Gold - RoHS Compliant NEW!</b>						
10	.788 (20.02)	MSH10ECT-ND	1.04	79.00	150.00	D2510-6VOC-AR-WD
14	.988 (25.10)	MSH14ECT-ND	1.23	93.22	177.00	D2514-6VOC-AR-WD
16	1.088 (27.64)	MSH16ECT-ND	1.35	102.70	195.00	D2516-6VOC-AR-WD
20	1.288 (32.72)	MSH20ECT-ND	1.39	105.86	201.00	D2520-6VOC-AR-WD
24	1.488 (37.80)	MSH24ECT-ND	1.48	112.18	213.00	D2524-6VOC-AR-WD

† For Tape and Reel part number, change CT-ND to TR-ND.

## Polarized Boardmount Socket .100" x .100" (2.54mm x 2.54mm) - 8500 Series

**FEATURES:** • Centerbump polarization • Mates with low profile shrouded headers  
**PHYSICAL:** • Insulation Material: Glass Filled Polyester (PBT) • Flammability: UL 94V-0 • Color: Gray • Contact Material: Copper Alloy • Plating - Underplating and U-slot: 2µm (79µ") Nickel • Wiping Area: 0.3µm (12µ") Gold • Solder Tails: Gold Flash • Marking: 3M logo, Part Identification Number and Orientation Triangle  
**ELECTRICAL:** • Current Rating: 1A • Insulation Resistance: > 1 x 10<sup>9</sup>Ω @ 500VDC  
**ENVIRONMENTAL:** • Temperature Rating: -55°C - 105°C

No. of Contacts	Dimension A Inches (mm)	Digi-Key Part No.	1	Pricing 100	500	3M Part No.
10	0.68 (17.3)	MSPV10-ND	2.20	167.48	757.90	8510-4500PL
16	0.98 (25.9)	MSPV16-ND	2.85	216.46	979.55	8516-4500PL
20	1.18 (30.0)	MSPV20-ND	3.37	255.96	1158.30	8520-4500PL
26	1.48 (37.6)	MSPV26-ND	3.89	295.46	1337.05	8526-4500PL
34	1.88 (47.7)	MSPV34-ND	4.70	357.08	1615.90	8534-4500PL

## Round Conductor Flat Cable 3365 Series

**Physical:** • .050" pitch • Insulation Material: Polyvinyl Chloride (PVC) • Color: Gray with Red Stripe on wire #1 • AWM 2651 105C 300V VVW1 • Conductors: 28 AWG, 7 x 36 Tinned Stranded Copper  
**Electrical:** • Voltage Rating: 300V • Insulation Resistance: > 1 x 10<sup>10</sup>Ω/10 feet  
**Environmental:** • Temperature Rating: -20°C - 105°C • Flammability Rating: VW-1

No. of Contacts	Dimensions Inch (mm)		Digi-Key Part No.	Note: X in Digi-Key Part No. Represents No. of Feet					
	A	B		5 ft.*	10 ft.*	25 ft.*	50 ft.*	100 ft.*	300 ft.*
6	0.30 (7.62)	0.25 (6.35)	MC06G-X-ND	1.22	2.27	5.06	8.73	15.71	41.88
10	0.50 (12.70)	0.45 (11.43)	MC10G-X-ND	1.71	3.17	7.08	12.21	21.98	58.60
14	0.70 (17.78)	0.65 (16.51)	MC14G-X-ND	2.16	4.02	8.96	15.45	27.80	74.14
16	0.80 (20.32)	0.75 (19.05)	MC16G-X-ND	2.47	4.59	10.24	17.65	31.77	84.72
20	1.00 (25.40)	0.95 (24.13)	MC20G-X-ND	3.09	5.74	12.80	22.07	39.72	105.92</