



Sullins Headers -----

2.54 mm [.100"] Contact Centers, Male Breakaway Header Dip Solder ----- 65-66
2.54 mm [.100"] Contact Centers, Male Breakaway Header Right Angle/SMT----- 67-68
1.00mm [.039"] Contact Centers, Top/Bottom Entry SMT Female Headers ----- 69-70
1.27mm [.050"] Contact Centers, Top/Bottom Entry SMT Female Headers ----- 71-72
2.00mm [.079"] Contact Centers, Top/Bottom Entry SMT Female Headers ----- 73-74
2.54mm [.100"] Contact Centers, Top/Bottom Entry SMT Female Headers ----- 75-76
1.00mm [.039"] Contact Centers, Shrouded (Box) Headers Straight/SMT ----- 77

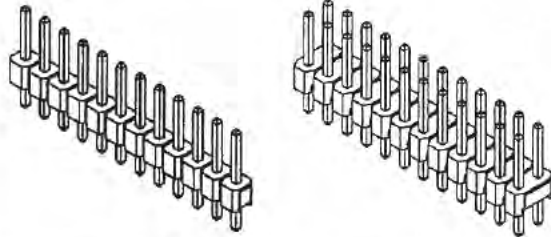


Sullins Headers

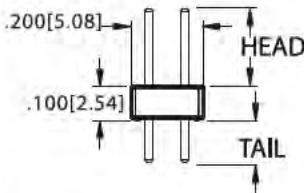
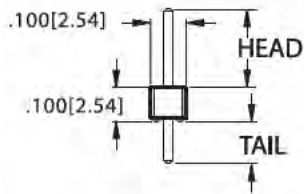
2.54 mm [.100"] Contact Centers, Male Breakaway Header Dip Solder

SPECIFICATIONS

- 3 amp current rating per contact
- UL Flammability Rating: 94V-0
- Insulator: PBT, Nylon 6T, Nylon 9T
- Contact Material: Brass



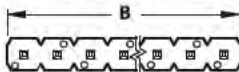
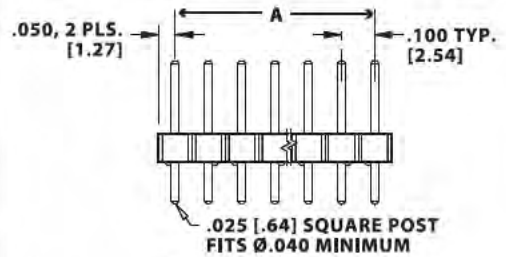
TERMINATION TYPES STRAIGHT TERMINATIONS



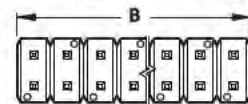
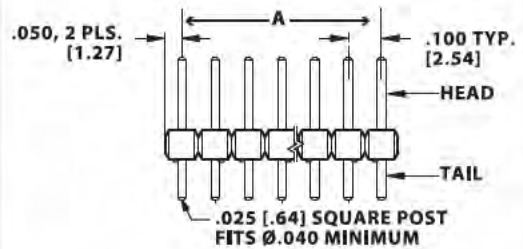
P/N CODE	HEAD DIMENSION	TAIL DIMENSION
AA	.230[5.84]	.120[3.05]
AB	.230[5.84]	.230[5.84]
AC	.230[5.84]	.320[8.13]
AD	.230[5.84]	.420[10.67]
AE	.230[5.84]	.520[13.21]
AF	.230[5.84]	.620[15.75]
AG	.230[5.84]	.720[18.29]
AH	.230[5.84]	.820[20.83]
AI	.230[5.84]	.900[22.86]
AJ	.230[5.84]	1.000[25.40]
AK	.230[5.84]	.035[0.89]
FA	.318[8.08]	.120[3.05]
FB	.318[8.08]	.220[5.59]
FC	.318[8.08]	.320[8.13]
FD	.318[8.08]	.420[10.67]
FE	.318[8.08]	.520[13.21]
FF	.318[8.08]	.620[15.75]
FG	.318[8.08]	.710[18.29]
FH	.318[8.08]	.810[20.83]
FI	.318[8.08]	.910[23.37]
FJ	.318[8.08]	.050[1.27]
ZA	.120[3.05]	.120[3.05]
ZB	.120[3.05]	.095[2.41]
ZC	.120[3.05]	.260[6.60]
ZD	.120[3.05]	.610[15.49]
ZI	.520[13.21]	.110[2.79]
ZJ	.720[18.29]	.110[2.79]
ZO	.820[20.83]	.110[2.79]
ZQ	1.020[25.91]	.110[2.79]
ZR	1.220[30.99]	.110[2.79]

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.

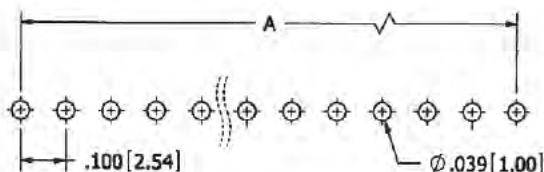


SINGLE READOUT, STRAIGHT TAIL SHOWN

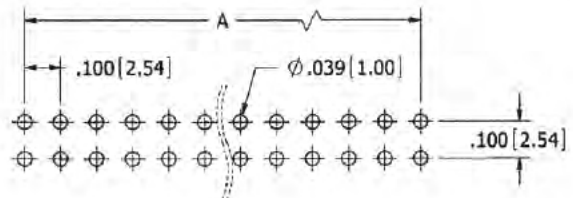


DUAL READOUT, STRAIGHT TAIL SHOWN

RECOMMENDED PCB LAYOUT



SINGLE READOUT, STRAIGHT TAIL SHOWN



DUAL READOUT, STRAIGHT TAIL SHOWN

**2.54 mm [.100"] Contact Centers, Male Breakaway Header
Dip Solder**



PART NUMBER OPTIONS

PR B C 002 S AA N - RC

INSULATOR/CONTACT MATERIAL

PR = PBT/BRASS
Operating Temperature: -40°C to + 105°C
Processing Temperature: 245° ± 5° C for 3~5 sec. Max.

NR = NYLON 6T/BRASS
Operating Temperature: -40°C to + 105°C
Processing Temperature: 230° for 60 sec. Max.
(260° for 10 sec. Max.)

GR = NYLON 9T/BRASS
Operating Temperature: -40°C to + 105°C
Processing Temperature: 230° for 60 sec. Max.
(260° for 10 sec. Max.)

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface Termination

B = .000010" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte
E = .000100" Pure Tin, Matte .000100" Pure Tin, Matte
P = Gold Flash Gold Flash

TERMINATION TYPE

AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK,
FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ,
ZA, ZB, ZC, ZD, ZI, ZJ, ZO, ZQ, ZR

READOUT

S = Single
D = Dual

NUMBER OF POSITIONS

Contact Per Row, 002 Thru 040

CONTACT CENTERS

.100" [2.54mm]

PART NUMBER	A		B		PART NUMBER	A		B	
	Inches	[MM]	Inches	[MM]		Inches	[MM]	Inches	[MM]
_R_C002S__N-RC	0.100	2.54	0.200	5.08	_R_C002D__N-RC	0.100	2.54	0.200	5.08
_R_C003S__N-RC	0.200	5.08	0.300	5.08	_R_C003D__N-RC	0.200	5.08	0.300	5.08
_R_C004S__N-RC	0.300	7.62	0.400	10.16	_R_C004D__N-RC	0.300	7.62	0.400	10.16
_R_C005S__N-RC	0.400	10.16	0.500	12.70	_R_C005D__N-RC	0.400	10.16	0.500	12.70
_R_C006S__N-RC	0.500	12.70	0.600	15.24	_R_C006D__N-RC	0.500	12.70	0.600	15.24
_R_C007S__N-RC	0.600	15.24	0.700	17.78	_R_C007D__N-RC	0.600	15.24	0.700	17.78
_R_C008S__N-RC	0.700	17.78	0.800	20.32	_R_C008D__N-RC	0.700	17.78	0.800	20.32
_R_C009S__N-RC	0.800	20.32	0.900	22.86	_R_C009D__N-RC	0.800	20.32	0.900	22.86
_R_C010S__N-RC	0.900	22.86	1.000	25.40	_R_C010D__N-RC	0.900	22.86	1.000	25.40
_R_C011S__N-RC	1.000	25.40	1.100	27.94	_R_C011D__N-RC	1.000	25.40	1.100	27.94
_R_C012S__N-RC	1.100	27.94	1.200	30.48	_R_C012D__N-RC	1.100	27.94	1.200	30.48
_R_C013S__N-RC	1.200	30.48	1.300	33.02	_R_C013D__N-RC	1.200	30.48	1.300	33.02
_R_C014S__N-RC	1.300	33.02	1.400	35.56	_R_C014D__N-RC	1.300	33.02	1.400	35.56
_R_C015S__N-RC	1.400	35.56	1.500	38.10	_R_C015D__N-RC	1.400	35.56	1.500	38.10
_R_C016S__N-RC	1.500	38.10	1.600	40.64	_R_C016D__N-RC	1.500	38.10	1.600	40.64
_R_C017S__N-RC	1.600	40.64	1.700	43.18	_R_C017D__N-RC	1.600	40.64	1.700	43.18
_R_C018S__N-RC	1.700	43.18	1.800	45.72	_R_C018D__N-RC	1.700	43.18	1.800	45.72
_R_C019S__N-RC	1.800	45.72	1.900	48.26	_R_C019D__N-RC	1.800	45.72	1.900	48.26
_R_C020S__N-RC	1.900	48.26	2.000	50.80	_R_C020D__N-RC	1.900	48.26	2.000	50.80
_R_C021S__N-RC	2.000	50.80	2.100	53.34	_R_C021D__N-RC	2.000	50.80	2.100	53.34
_R_C022S__N-RC	2.100	53.34	2.200	55.88	_R_C022D__N-RC	2.100	53.34	2.200	55.88
_R_C023S__N-RC	2.200	55.88	2.300	58.42	_R_C023D__N-RC	2.200	55.88	2.300	58.42
_R_C024S__N-RC	2.300	58.42	2.400	60.96	_R_C024D__N-RC	2.300	58.42	2.400	60.96
_R_C025S__N-RC	2.400	60.96	2.500	63.50	_R_C025D__N-RC	2.400	60.96	2.500	63.50
_R_C026S__N-RC	2.500	63.50	2.600	66.04	_R_C026D__N-RC	2.500	63.50	2.600	66.04
_R_C027S__N-RC	2.600	66.04	2.700	68.58	_R_C027D__N-RC	2.600	66.04	2.700	68.58
_R_C028S__N-RC	2.700	68.58	2.800	71.12	_R_C028D__N-RC	2.700	68.58	2.800	71.12
_R_C029S__N-RC	2.800	71.12	2.900	73.66	_R_C029D__N-RC	2.800	71.12	2.900	73.66
_R_C030S__N-RC	2.900	73.66	3.000	76.20	_R_C030D__N-RC	2.900	73.66	3.000	76.20
_R_C031S__N-RC	3.000	76.20	3.100	78.74	_R_C031D__N-RC	3.000	76.20	3.100	78.74
_R_C032S__N-RC	3.100	78.74	3.200	81.28	_R_C032D__N-RC	3.100	78.74	3.200	81.28
_R_C033S__N-RC	3.200	81.28	3.300	83.82	_R_C033D__N-RC	3.200	81.28	3.300	83.82
_R_C034S__N-RC	3.300	83.82	3.400	86.36	_R_C034D__N-RC	3.300	83.82	3.400	86.36
_R_C035S__N-RC	3.400	86.36	3.500	88.90	_R_C035D__N-RC	3.400	86.36	3.500	88.90
_R_C036S__N-RC	3.500	88.90	3.600	91.44	_R_C036D__N-RC	3.500	88.90	3.600	91.44
_R_C037S__N-RC	3.600	91.44	3.700	93.98	_R_C037D__N-RC	3.600	91.44	3.700	93.98
_R_C038S__N-RC	3.700	93.98	3.800	96.52	_R_C038D__N-RC	3.700	93.98	3.800	96.52
_R_C039S__N-RC	3.800	96.52	3.900	99.06	_R_C039D__N-RC	3.800	96.52	3.900	99.06
_R_C040S__N-RC	3.900	99.06	4.000	101.60	_R_C040D__N-RC	3.900	99.06	4.000	101.60



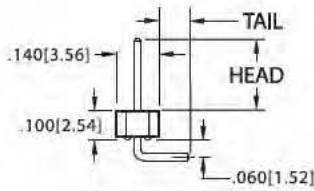
**2.54 mm [.100"] Contact Centers, Male Breakaway Header
Right Angle/SMT**

SPECIFICATIONS

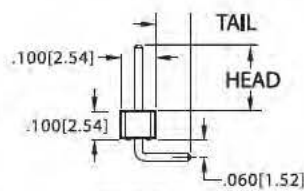
- 3 amp current rating per contact
- UL Flammability Rating: 94V-0
- Insulator: PBT, Nylon 6T, Nylon 9T
- Contact Material: Brass



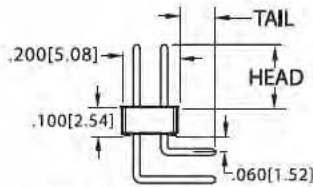
RIGHT ANGLE BEND TERMINATIONS



**RIGHT ANGLE
(Standard)**



**RIGHT ANGLE SINGLE (Narrow)
-M71 Modification Code**

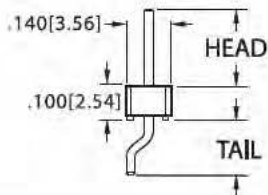


**RIGHT ANGLE DUAL (Narrow)
-M71 Modification Code**

P/N CODE	HEAD DIMENSION	TAIL DIMENSION	-M71 TAIL DIMENSION
BA	.230[5.84]	.100[2.54]	.120[3.05]
BB	.230[5.84]	.200[5.08]	.220[5.59]
BC	.230[5.84]	.300[7.62]	.320[8.13]
BD	.230[5.84]	.400[10.16]	.420[10.67]
BE	.230[5.84]	.500[12.17]	.520[13.21]
BF	.230[5.84]	.600[15.24]	.620[15.75]
BG	.230[5.84]	.700[17.78]	.720[18.29]
BH	.230[5.84]	.800[20.32]	.820[20.83]
BI	.230[5.84]	.900[22.86]	.920[23.37]
BJ	.230[5.84]	1.000[25.40]	1.020[25.91]
GA	.318[8.08]	.100[2.54]	.120[3.05]
GB	.318[8.08]	.200[5.08]	.220[5.59]
GC	.318[8.08]	.300[7.62]	.320[8.13]
GD	.318[8.08]	.400[10.16]	.420[10.67]
GE	.318[8.08]	.600[15.24]	.620[15.75]
GF	.318[8.08]	.800[20.32]	.820[20.83]
DA	.120[3.05]	.120[3.05]	.140[3.56]

SMT TERMINATIONS

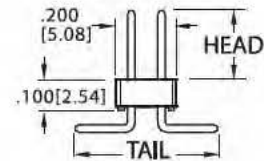
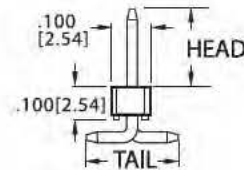
Single Row with -M89 Modification Code



P/N CODE	HEAD DIMENSION	TAIL DIMENSION
BS	.230[5.84]	.180[4.57]
GS	.318[8.08]	.180[4.57]
ZC	.120[3.05]	.180[4.57]
ZU	.420[10.67]	.180[4.57]

SMT TERMINATIONS

Single or Dual Row with -M30 Modification Code



P/N CODE	HEAD DIMENSION	SINGLE ROW TAIL DIMENSION	DUAL ROW TAIL DIMENSION
AB	.230[5.84]	.320[8.13]	.420[10.67]
FB	.318[8.08]	.300[7.62]	.400[10.16]
ZS	.120[3.05]	.200[5.08]	.300[7.62]
ZT	.420[10.67]	.200[5.08]	.300[7.62]



**2.54 mm [.100"] Contact Centers, Male Breakaway Header
Right Angle/SMT**

PART NUMBER OPTIONS

INSULATOR/CONTACT MATERIAL

PR = PBT/BRASS
Operating Temperature: -40°C to + 105°C
Processing Temperature: 245° ± 5° C for 3~5 sec. Max.

NR = NYLON 6T/BRASS
Operating Temperature: -40°C to + 105°C
Processing Temperature: 230° for 60 sec. Max.
(260° for 10 sec. Max.)

GR = NYLON 9T/BRASS
Operating Temperature: -40°C to + 105°C
Processing Temperature: 230° for 60 sec. Max.
(260° for 10 sec. Max.)

CONTACT FINISH - RoHS Compliant
All platings are Lead Free and have .000050" Nickel underplate

Contact Surface	Termination
B = .000010" Gold	.000100" Pure Tin, Matte
C = .000030" Gold	.000100" Pure Tin, Matte
E = .000100" Pure Tin, Matte	.000100" Pure Tin, Matte
P = Gold Flash	Gold Flash

CONTACT CENTERS
.100" [2.54mm]

MODIFICATION CODE (Consult Factory)
OMIT FOR STANDARD

- M30 = SMT ('G' Material Only), Vertical
- M89 = SMT ('G' Material Only), Horizontal
- M71 = Narrow Body (Right Angle Only)

MOUNTING STYLE
N = No Mounting

TERMINATION TYPE

Right Angle = BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ
GA, GB, GC, GD, GE, GF, DA (*Single Row Only*)

Right Angle with -M71 Modification Code
= BA, BB, BC, BD, BE, BF, BI, BJ, GA, GB, GE, GF

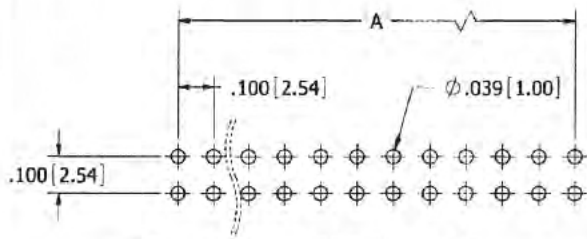
SMT with -M89 Modification Code
= BS, GS, ZC, ZU (*Single Row Only*)

SMT with -M30 Modification Code
= AB, FB, ZS, ZT

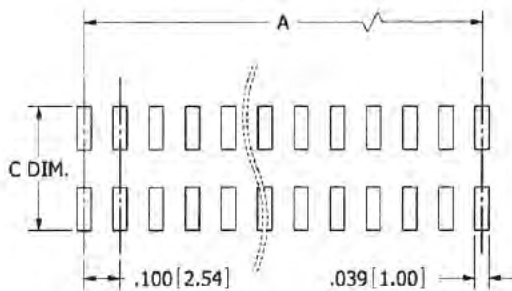
READOUT
S = Single
D = Dual

NUMBER OF POSITIONS
Contact Per Row, 002 Thru 040

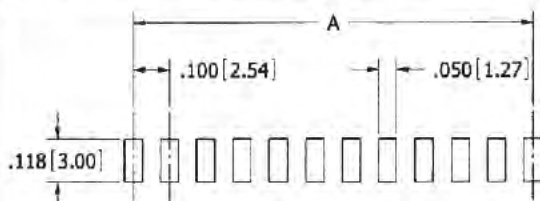
RECOMMENDED PCB LAYOUT



RIGHT ANGLE DUAL (Narrow)
-M71 Modification Code



Single or Dual Row with -M30 Modification Code



Single Row with -M89 Modification Code

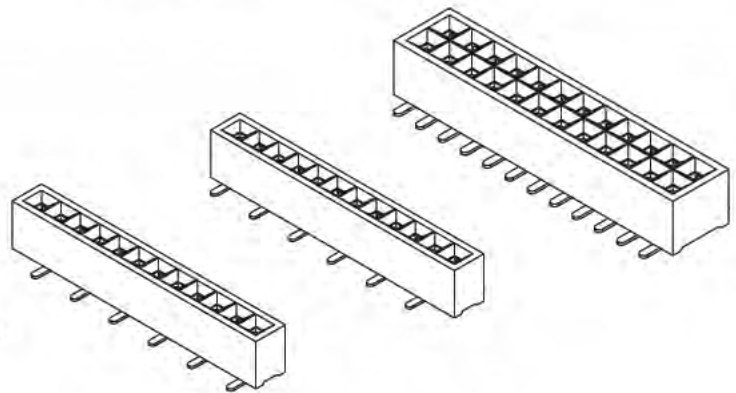
PART NUMBER	A		B	
	Inches	[MM]	Inches	[MM]
R_C002_N_RC	0.100	2.54	0.200	5.08
R_C003_N_RC	0.200	5.08	0.300	5.08
R_C004_N_RC	0.300	7.62	0.400	10.16
R_C005_N_RC	0.400	10.16	0.500	12.70
R_C006_N_RC	0.500	12.70	0.600	15.24
R_C007_N_RC	0.600	15.24	0.700	17.78
R_C008_N_RC	0.700	17.78	0.800	20.32
R_C009_N_RC	0.800	20.32	0.900	22.86
R_C010_N_RC	0.900	22.86	1.000	25.40
R_C011_N_RC	1.000	25.40	1.100	27.94
R_C012_N_RC	1.100	27.94	1.200	30.48
R_C013_N_RC	1.200	30.48	1.300	33.02
R_C014_N_RC	1.300	33.02	1.400	35.56
R_C015_N_RC	1.400	35.56	1.500	38.10
R_C016_N_RC	1.500	38.10	1.600	40.64
R_C017_N_RC	1.600	40.64	1.700	43.18
R_C018_N_RC	1.700	43.18	1.800	45.72
R_C019_N_RC	1.800	45.72	1.900	48.26
R_C020_N_RC	1.900	48.26	2.000	50.80
R_C021_N_RC	2.000	50.80	2.100	53.34
R_C022_N_RC	2.100	53.34	2.200	55.88
R_C023_N_RC	2.200	55.88	2.300	58.42
R_C024_N_RC	2.300	58.42	2.400	60.96
R_C025_N_RC	2.400	60.96	2.500	63.50
R_C026_N_RC	2.500	63.50	2.600	66.04
R_C027_N_RC	2.600	66.04	2.700	68.58
R_C028_N_RC	2.700	68.58	2.800	71.12
R_C029_N_RC	2.800	71.12	2.900	73.66
R_C030_N_RC	2.900	73.66	3.000	76.20
R_C031_N_RC	3.000	76.20	3.100	78.74
R_C032_N_RC	3.100	78.74	3.200	81.28
R_C033_N_RC	3.200	81.28	3.300	83.82
R_C034_N_RC	3.300	83.82	3.400	86.36
R_C035_N_RC	3.400	86.36	3.500	88.90
R_C036_N_RC	3.500	88.90	3.600	91.44
R_C037_N_RC	3.600	91.44	3.700	93.98
R_C038_N_RC	3.700	93.98	3.800	96.52
R_C039_N_RC	3.800	96.52	3.900	99.06
R_C040_N_RC	3.900	99.06	4.000	101.60



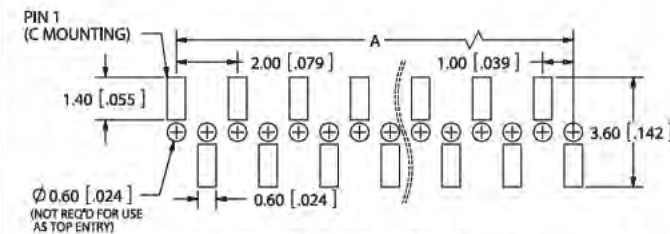
1.00mm [.039"] Contact Centers, Top/Bottom Entry SMT Female Headers

SPECIFICATIONS

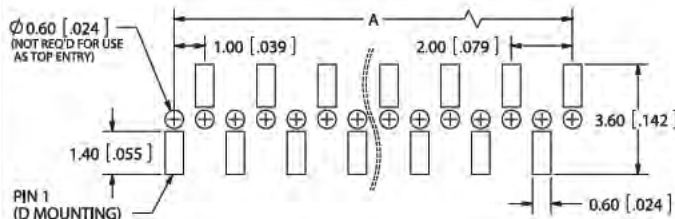
- Insulator Material: L.C.P, UL 94V-0
- Contact Resistance: 20m OHMs Max.
- Current Rating: 1 AMP per contact
- Dielectric Withstanding Voltage: AC 300 V.
- Insulation Resistance: 1000 Mega OHMS
- Operating Temperature: - 40° C to + 125° C
- Processing Temperature: 260° C for 10 seconds Max.



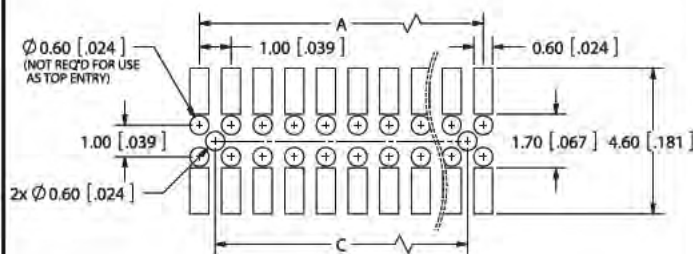
RECOMMENDED PCB LAYOUT



SFM210-LP_E-S__-SC-BK

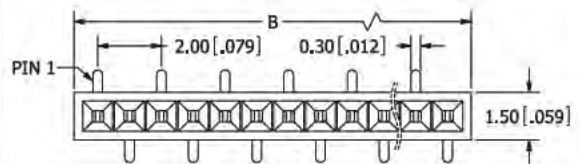


SFM210-LP_E-S__-SD-BK

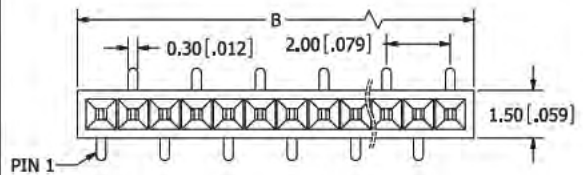


SFM210-LP_E-D__-SD-BK

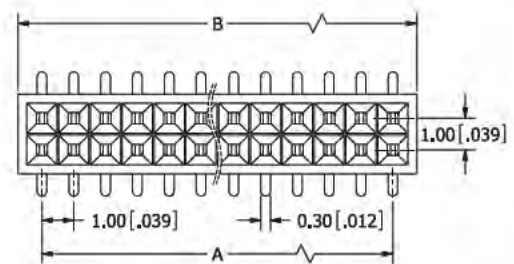
DIMENSIONS



SFM210-LP_E-S__-SC-BK
(STANDARD)



SFM210-LP_E-S__-SD-BK
(OPPOSITE BEND, APPLICABLE ON EVEN PIN COUNTS)

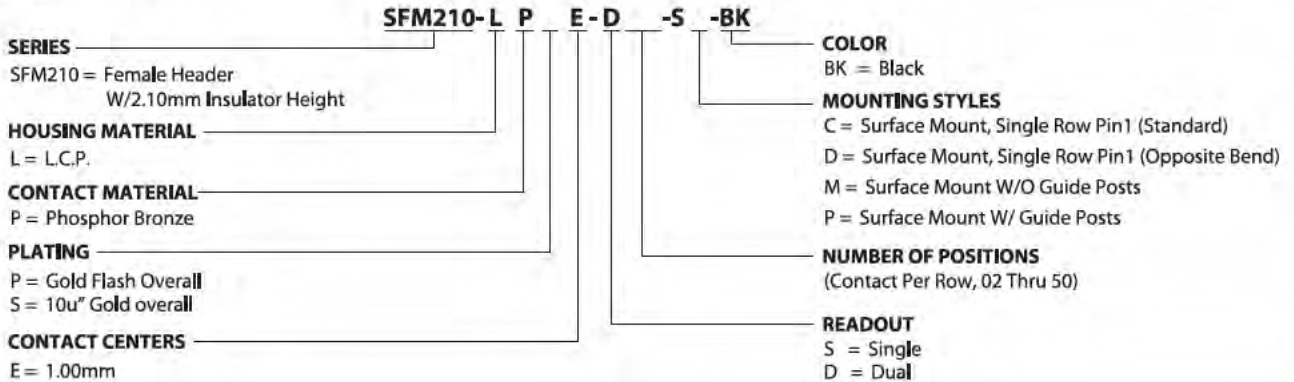


SFM210-LP_E-D__-SD-BK

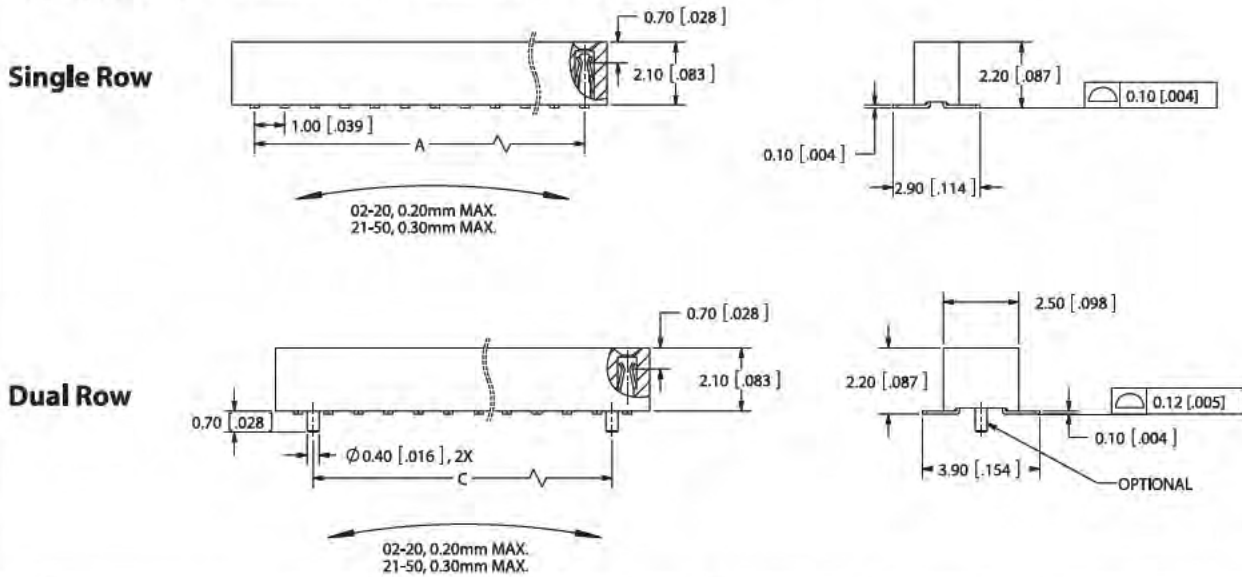


1.00mm [.039"] Contact Centers, Top/Bottom Entry SMT Female Headers

PART NUMBER OPTIONS



DIMENSIONS Dimensions in [] are in inches, all others are in millimeters.



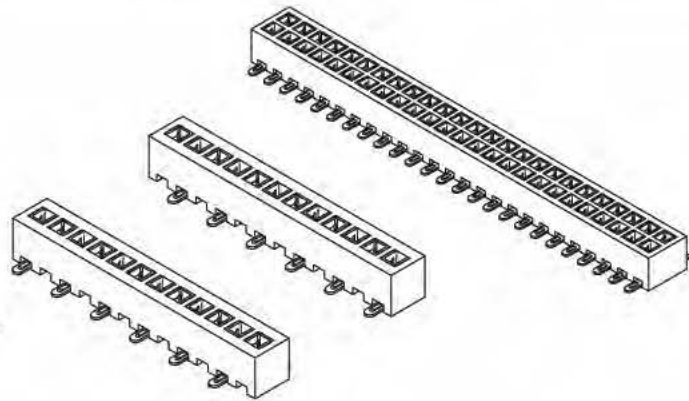
No. of Contacts Single/Dual	A		B		C		No. of Contacts Single/Dual	A		B		C	
	mm	inch	mm	inch	mm	inch		mm	inch	mm	inch	mm	inch
02/04*	1.00	0.039	2.50	0.098	N/A	N/A	26/52	25.00	0.984	26.50	1.043	24.00	0.945
03/06	2.00	0.079	3.50	0.138	1.00	0.039	27/54	26.00	1.024	27.50	1.083	25.00	0.984
04/08	3.00	0.118	4.50	0.177	2.00	0.079	28/56	27.00	1.063	28.50	1.122	26.00	1.024
05/10	4.00	0.157	5.50	0.217	3.00	0.118	29/58	28.00	1.102	29.50	1.161	27.00	1.063
06/12	5.00	0.197	6.50	0.256	4.00	0.157	30/60	29.00	1.142	30.50	1.201	28.00	1.102
07/14	6.00	0.236	7.50	0.295	5.00	0.197	31/62	30.00	1.181	31.50	1.240	29.00	1.142
08/16	7.00	0.276	8.50	0.335	6.00	0.236	32/64	31.00	1.220	32.50	1.280	30.00	1.181
09/18	8.00	0.315	9.50	0.374	7.00	0.276	33/66	32.00	1.260	33.50	1.319	31.00	1.220
10/20	9.00	0.354	10.50	0.413	8.00	0.315	34/68	33.00	1.299	34.50	1.358	32.00	1.260
11/22	10.00	0.394	11.50	0.453	9.00	0.354	35/70	34.00	1.339	35.50	1.398	33.00	1.299
12/24	11.00	0.433	12.50	0.492	10.00	0.394	36/72	35.00	1.378	36.50	1.437	34.00	1.339
13/26	12.00	0.472	13.50	0.531	11.00	0.433	37/74	36.00	1.417	37.50	1.476	35.00	1.378
14/28	13.00	0.512	14.50	0.571	12.00	0.472	38/76	37.00	1.457	38.50	1.516	36.00	1.417
15/30	14.00	0.551	15.50	0.610	13.00	0.512	39/78	38.00	1.496	39.50	1.555	37.00	1.457
16/32	15.00	0.591	16.50	0.650	14.00	0.551	40/80	39.00	1.535	40.50	1.594	38.00	1.496
17/34	16.00	0.630	17.50	0.689	15.00	0.591	41/82	40.00	1.575	41.50	1.634	39.00	1.535
18/36	17.00	0.669	18.50	0.728	16.00	0.630	42/84	41.00	1.614	42.50	1.673	40.00	1.575
19/38	18.00	0.709	19.50	0.768	17.00	0.669	43/86	42.00	1.654	43.50	1.713	41.00	1.614
20/40	19.00	0.748	20.50	0.807	18.00	0.709	44/88	43.00	1.693	44.50	1.752	42.00	1.654
21/42	20.00	0.787	21.50	0.846	19.00	0.748	45/90	44.00	1.732	45.50	1.791	43.00	1.693
22/44	21.00	0.827	22.50	0.886	20.00	0.787	46/92	45.00	1.772	46.50	1.831	44.00	1.732
23/46	22.00	0.866	23.50	0.925	21.00	0.827	47/94	46.00	1.811	47.50	1.870	45.00	1.772
24/48	23.00	0.906	24.50	0.965	22.00	0.866	48/96	47.00	1.850	48.50	1.909	46.00	1.811
25/50	24.00	0.945	25.50	1.004	23.00	0.906	49/98	48.00	1.890	49.50	1.949	47.00	1.850
							50/100	49.00	1.929	50.50	1.988	48.00	1.890



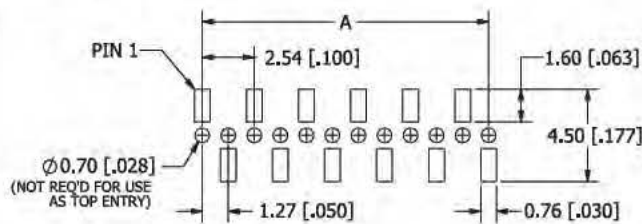
1.27mm [.050"] Contact Centers, Top/Bottom Entry SMT Female Headers

SPECIFICATIONS

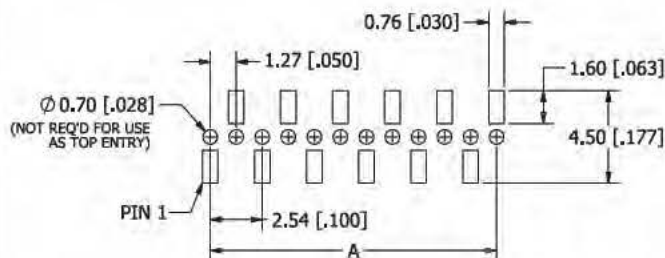
- Insulator Material: Nylon 6T, UL 94V-0
- Contact Resistance: 20m OHMs Max.
- Current Rating: 1 AMP per contact
- Dielectric WithStanding: 500 V AC.
- Insulation Resistance: 5000 Mega OHMS
- Operating Temperature: - 40° C to + 105° C
- Processing Temperature: 230° C for 60 seconds Max.



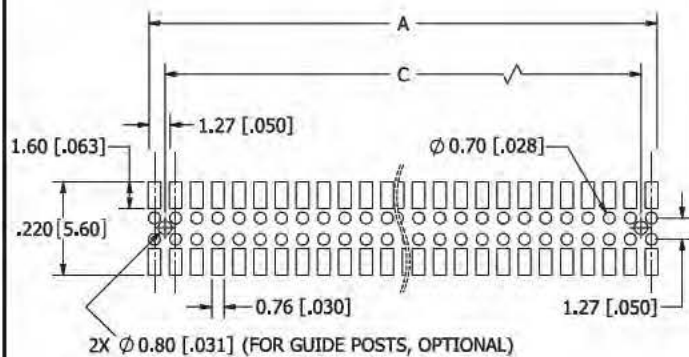
RECOMMENDED PCB LAYOUT



SFM230-NPPB-S__-SC-BK

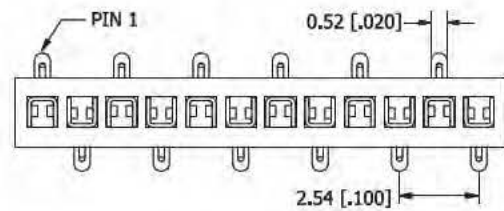


SFM230-NPPB-S__-SD-BK

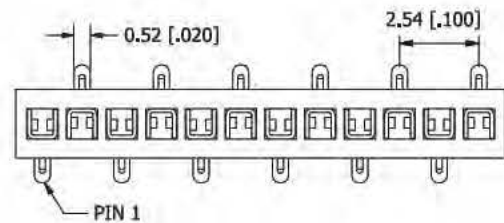


SFM230-NPPB-D__-S_-BK

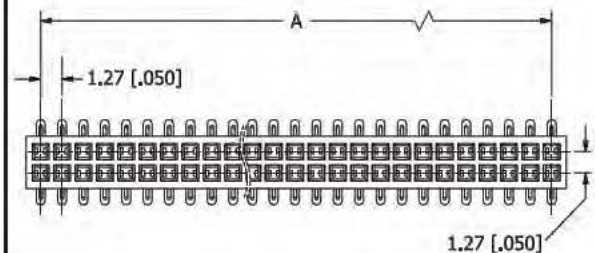
DIMENSIONS



SFM230-NPPB-S__-SC-BK
(STANDARD)



SFM230-NPPB-S__-SD-BK
(OPPOSITE BEND, APPLICABLE ON EVEN PIN COUNTS)

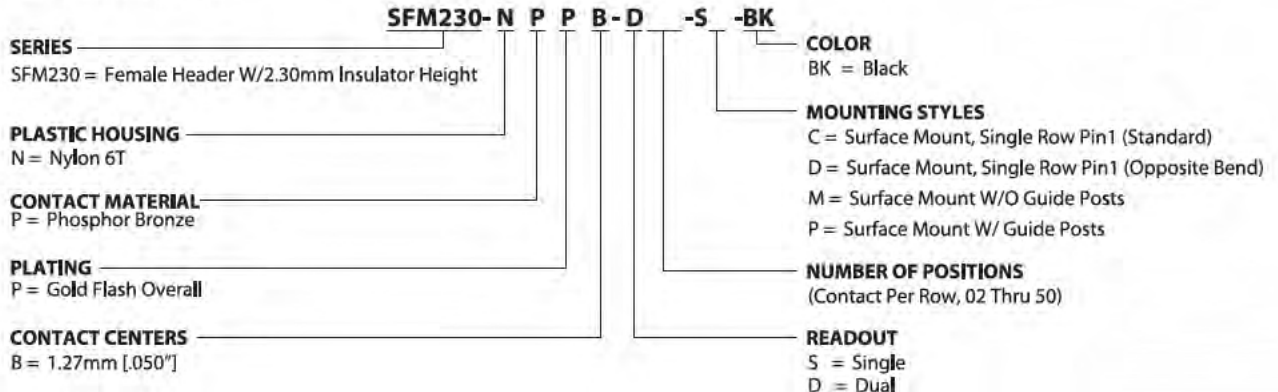


SFM230-NPPB-D__-S_-BK

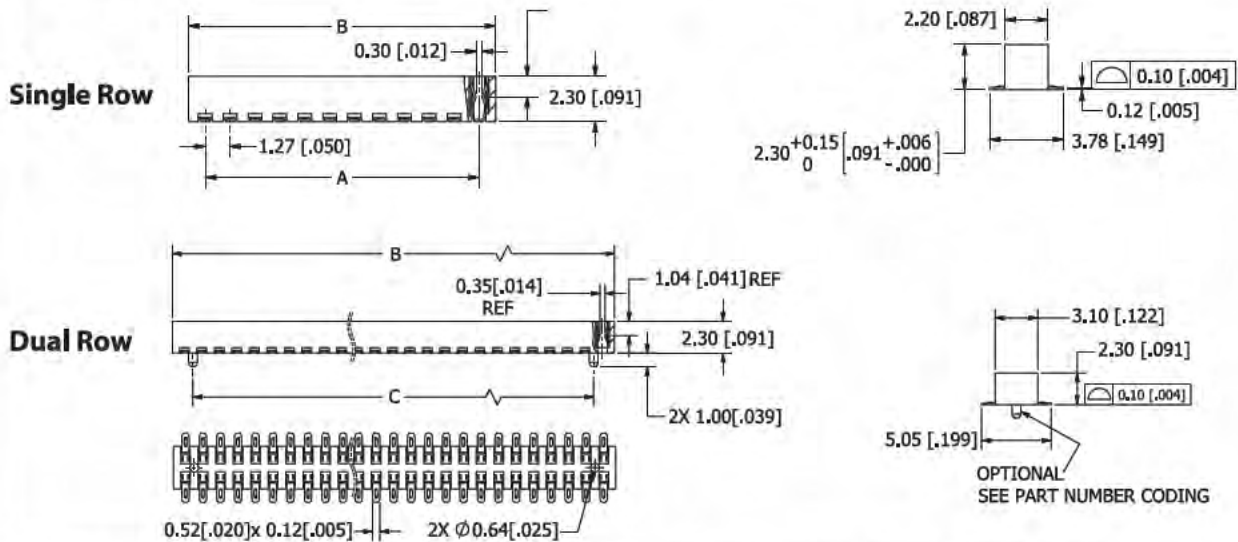


1.27mm [.050"] Contact Centers, Top/Bottom Entry SMT Female Headers

PART NUMBER OPTIONS



DIMENSIONS Dimensions in [] are in inches, all others are in millimeters.



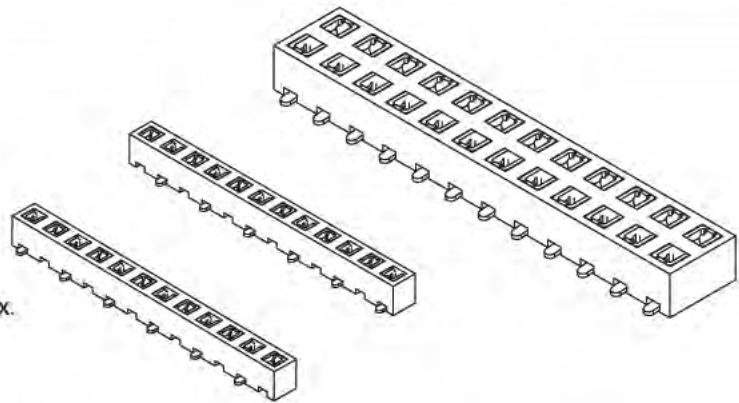
No. of Contacts Single/Dual	A		B		C		No. of Contacts Single/Dual	A		B		C	
	inch	mm	inch	mm	inch	mm		inch	mm	inch	mm	inch	mm
02/04*	0.050	1.27	0.118	2.99	N/A	N/A	26/52	1.250	31.75	1.318	33.47	1.200	30.48
03/06	0.100	2.54	0.168	4.26	0.050	1.27	27/54	1.300	33.02	1.368	34.74	1.250	31.75
04/08	0.150	3.81	0.218	5.53	0.100	2.54	28/56	1.350	34.29	1.418	36.01	1.300	33.02
05/10	0.200	5.08	0.268	6.80	0.150	3.81	29/58	1.400	35.56	1.468	37.28	1.350	34.29
06/12	0.250	6.35	0.318	8.07	0.200	5.08	30/60	1.450	36.83	1.518	38.55	1.400	35.56
07/14	0.300	7.62	0.368	9.34	0.250	6.35	31/62	1.500	38.10	1.568	39.82	1.450	36.83
08/16	0.350	8.89	0.418	10.61	0.300	7.62	32/64	1.550	39.37	1.618	41.09	1.500	38.10
09/18	0.400	10.16	0.468	11.88	0.350	8.89	33/66	1.600	40.64	1.668	42.36	1.550	39.37
10/20	0.450	11.43	0.518	13.15	0.400	10.16	34/68	1.650	41.91	1.718	43.63	1.600	40.64
11/22	0.500	12.70	0.568	14.42	0.450	11.43	35/70	1.700	43.18	1.768	44.90	1.650	41.91
12/24	0.550	13.97	0.618	15.69	0.500	12.70	36/72	1.750	44.45	1.818	46.17	1.700	43.18
13/26	0.600	15.24	0.668	16.99	0.550	13.97	37/74	1.800	45.72	1.868	47.44	1.750	44.45
14/28	0.650	16.51	0.718	18.23	0.600	15.24	38/76	1.850	46.99	1.918	48.71	1.800	45.72
15/30	0.700	17.78	0.768	19.50	0.550	16.51	39/78	1.900	48.26	1.968	49.98	1.850	46.99
16/32	0.750	19.05	0.818	20.77	0.700	17.78	40/80	1.950	49.53	2.018	51.25	1.900	48.26
17/34	0.800	20.32	0.868	22.04	0.750	19.05	41/82	2.000	50.80	2.068	52.52	1.950	49.53
18/36	0.850	21.59	0.918	23.31	0.800	20.32	42/84	2.050	52.07	2.118	53.79	2.000	50.80
19/38	0.900	22.86	0.968	24.58	0.850	21.59	43/86	2.100	53.34	2.168	55.06	2.050	52.07
20/40	0.950	24.13	1.018	25.85	0.900	22.86	44/88	2.150	54.61	2.218	56.33	2.100	53.34
21/42	1.000	25.40	1.068	27.12	0.950	24.13	45/90	2.200	55.88	2.268	57.60	2.150	54.61
22/44	1.050	26.67	1.118	28.39	1.000	25.40	46/92	2.250	57.15	2.318	58.87	2.200	55.88
23/46	1.100	27.94	1.168	29.66	1.050	26.67	47/94	2.300	58.42	2.368	60.14	2.250	57.15
24/48	1.150	29.21	1.218	30.93	1.100	27.94	48/96	2.350	59.69	2.418	61.41	2.300	58.42
25/50	1.200	30.48	1.268	32.20	1.150	29.21	49/98	2.400	60.96	2.468	62.68	2.350	59.69
							50/100	2.450	62.23	2.518	63.95	2.400	60.96



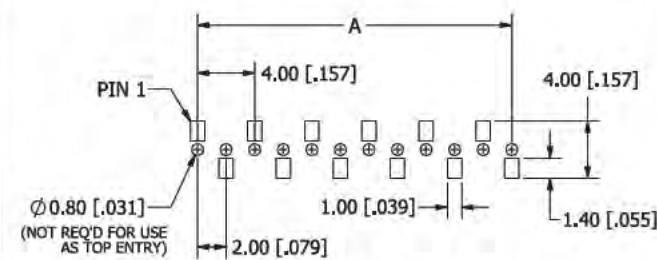
2.00mm [.079"] Contact Centers, Top/Bottom Entry SMT Female Headers

SPECIFICATIONS

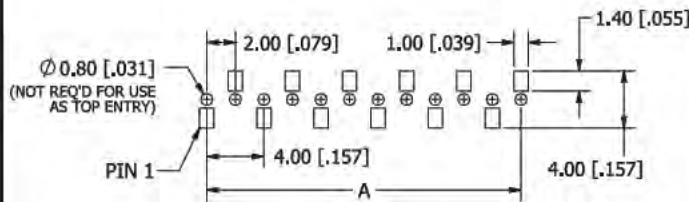
- Insulator Material: Nylon 6T, UL 94V-0
- Contact Resistance: 20m OHMs Max.
- Current Rating: 2 AMP per contact
- Dielectric WithStanding: 500 V AC.
- Insulation Resistance: 5000 Mega OHMS
- Operating Temperature: - 40° C to + 105° C
- Processing Temperature: 230° C for 60 seconds Max.



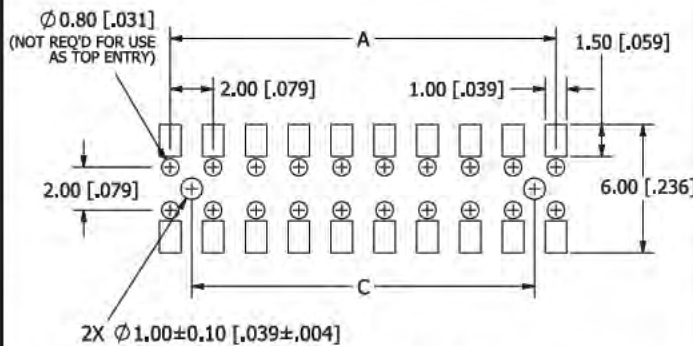
RECOMMENDED PCB LAYOUT



SFM230-NPPN-S__-SC-BK

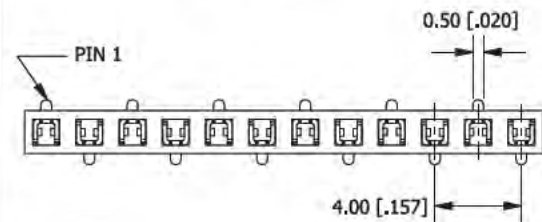


SFM230-NPPN-S__-SD-BK

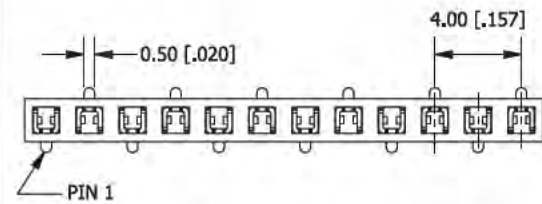


SFM230-NPPN-D__-S-BK

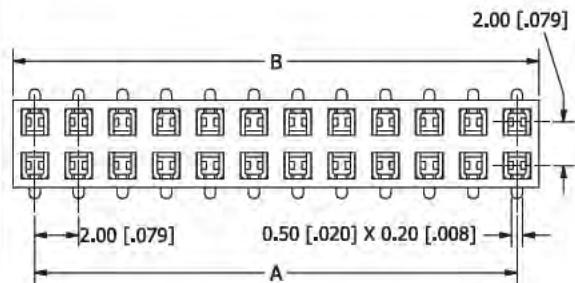
DIMENSIONS



SFM230-NPPN-S__-SC-BK
(STANDARD)



SFM230-NPPN-S__-SD-BK
(OPPOSITE BEND, APPLICABLE ON EVEN PIN COUNTS)

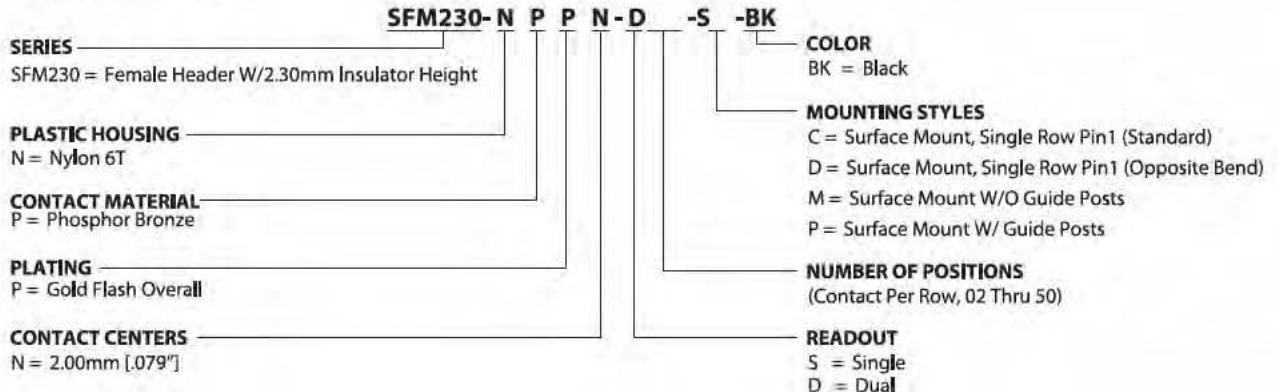


SFM230-NPPN-D__-S-BK

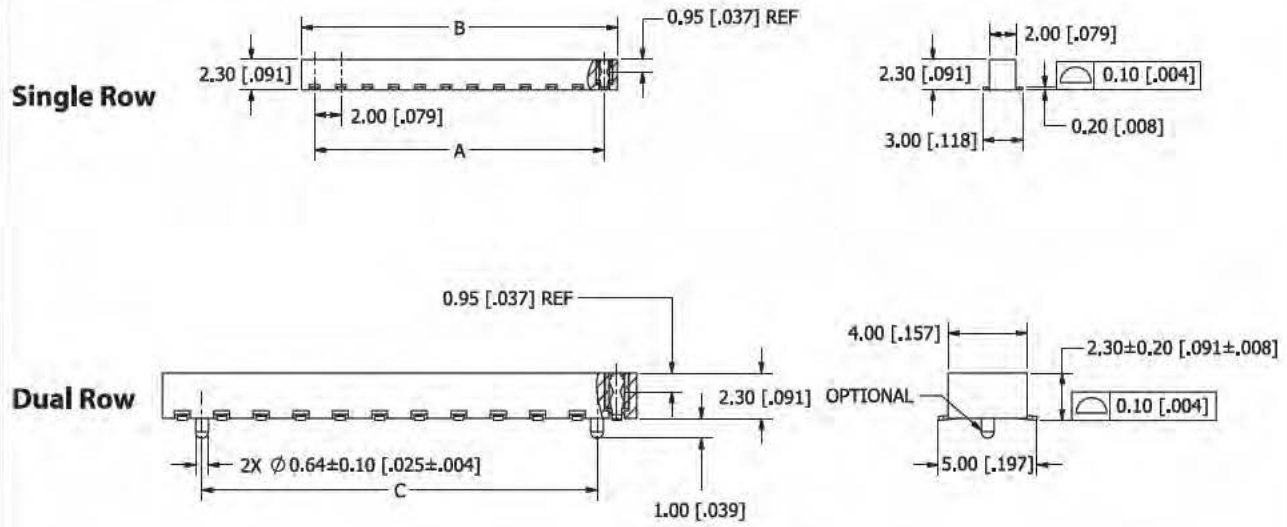


2.00mm [.079"] Contact Centers, Top/Bottom Entry SMT Female Headers

PART NUMBER OPTIONS



DIMENSIONS Dimensions in [] are in inches , all others are in millimeters.



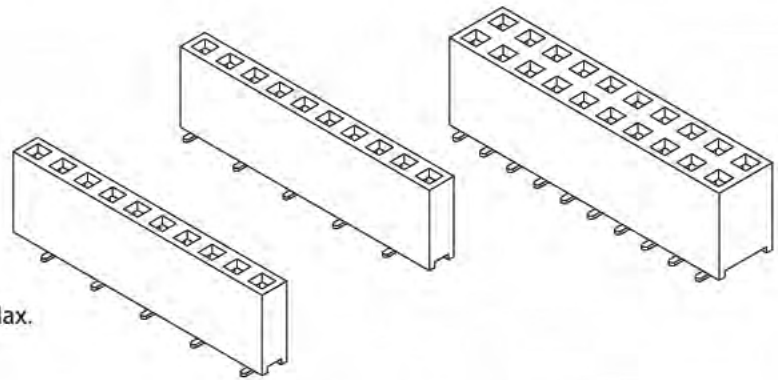
No. of Contacts Single/Dual	A		B		C		No. of Contacts Single/Dual	A		B		C	
	inch	mm	inch	mm	inch	mm		inch	mm	inch	mm	inch	mm
02/04*	0.079	2.00	0.157	4.00	N/A	N/A	21/42	1.575	40.00	1.654	42.00	1.496	38.00
03/06	0.157	4.00	0.236	6.00	0.079	2.00	22/44	1.654	42.00	1.732	44.00	1.575	40.00
04/08	0.236	6.00	0.315	8.00	0.157	4.00	23/46	1.732	44.00	1.811	46.00	1.654	42.00
05/10	0.315	8.00	0.394	10.00	0.236	6.00	24/48	1.811	46.00	1.890	48.00	1.732	44.00
06/12	0.394	10.00	0.472	12.00	0.315	8.00	25/50	1.890	48.00	1.969	50.00	1.811	46.00
07/14	0.472	12.00	0.551	14.00	0.394	10.00	26/52	1.969	50.00	2.047	52.00	1.890	48.00
08/16	0.551	14.00	0.630	16.00	0.472	12.00	27/54	2.047	52.00	2.126	54.00	1.969	50.00
09/18	0.630	16.00	0.709	18.00	0.551	14.00	28/56	2.126	54.00	2.205	56.00	2.047	52.00
10/20	0.709	18.00	0.787	20.00	0.630	16.00	29/58	2.205	56.00	2.283	58.00	2.126	54.00
11/22	0.787	20.00	0.866	22.00	0.709	18.00	30/60	2.283	58.00	2.362	60.00	2.205	56.00
12/24	0.866	22.00	0.945	24.00	0.787	20.00	31/62	2.362	60.00	2.441	62.00	2.283	58.00
13/26	0.945	24.00	1.024	26.00	0.866	22.00	32/64	2.441	62.00	2.520	64.00	2.362	60.00
14/28	1.024	26.00	1.102	28.00	0.945	24.00	33/66	2.520	64.00	2.598	66.00	2.441	62.00
15/30	1.102	28.00	1.181	30.00	1.024	26.00	34/68	2.598	66.00	2.677	68.00	2.520	64.00
16/32	1.181	30.00	1.260	32.00	1.102	28.00	35/70	2.677	68.00	2.756	70.00	2.598	66.00
17/34	1.260	32.00	1.339	34.00	1.181	30.00	36/72	2.756	70.00	2.835	72.00	2.677	68.00
18/36	1.339	34.00	1.417	36.00	1.260	32.00	37/74	2.835	72.00	2.913	74.00	2.756	70.00
19/38	1.417	36.00	1.496	38.00	1.339	34.00	38/76	2.913	74.00	2.992	76.00	2.835	72.00
20/40	1.496	38.00	1.575	40.00	1.417	36.00	39/78	2.992	76.00	3.071	78.00	2.913	74.00
							40/80	3.071	78.00	3.150	80.00	2.992	76.00



2.54mm [.100"] Contact Centers, Top/Bottom Entry SMT Female Headers

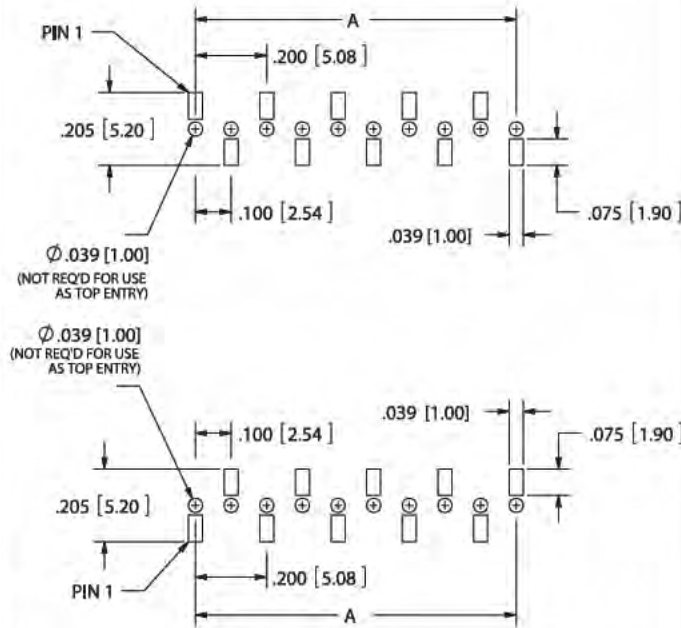
SPECIFICATIONS

- Insulator Material: Nylon 6T, UL 94V-0
- Contact Resistance: 20m OHMs Max.
- Current Rating: 3 AMP per contact
- Dielectric With Standing: 1000 V AC.
- Insulation Resistance: 5000 Mega OHMS
- Operating Temperature: - 40° C to + 105° C
- Processing Temperature: 230° C for 60 seconds Max.

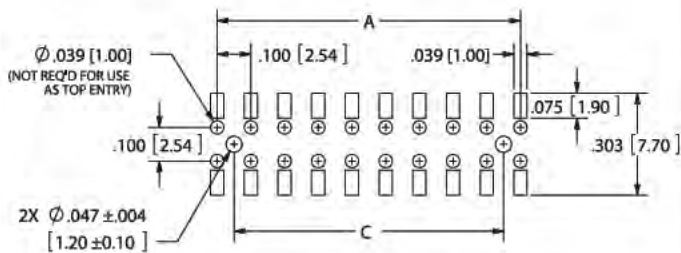


RECOMMENDED PCB LAYOUT

SINGLE ROW

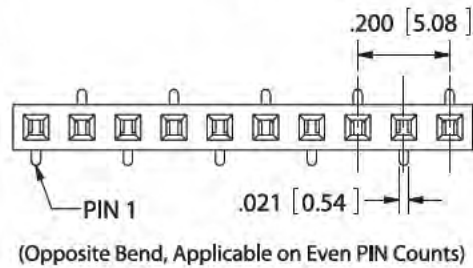
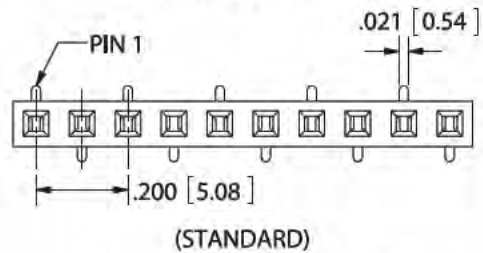


DUAL ROW

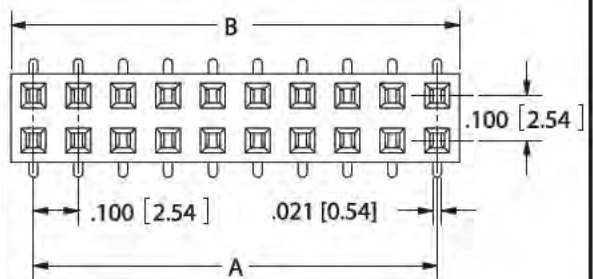


DIMENSIONS

SINGLE ROW



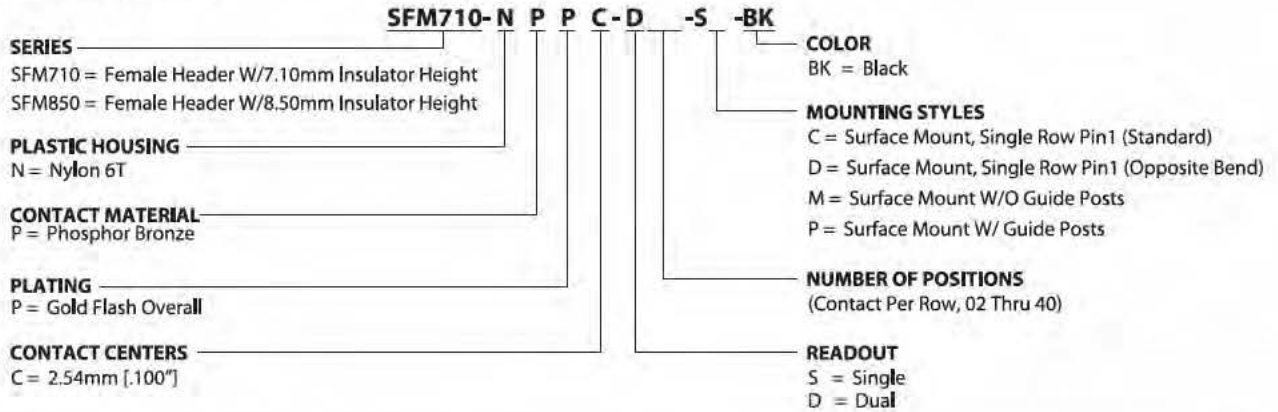
DUAL ROW





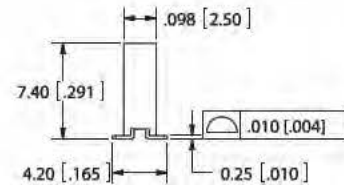
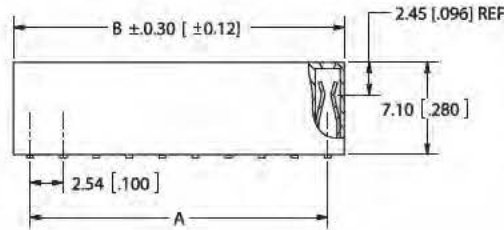
2.54mm [.100"] Contact Centers, Top/Bottom Entry SMT Female Headers

PART NUMBER OPTIONS

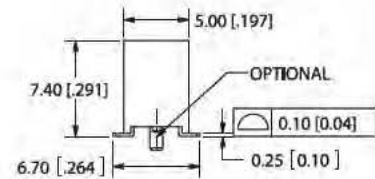
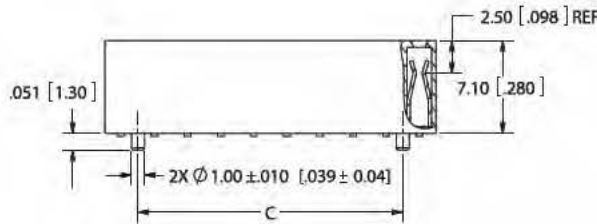


DIMENSIONS Dimensions in [] are in inches , all others are in millimeters.

Single Row



Dual Row



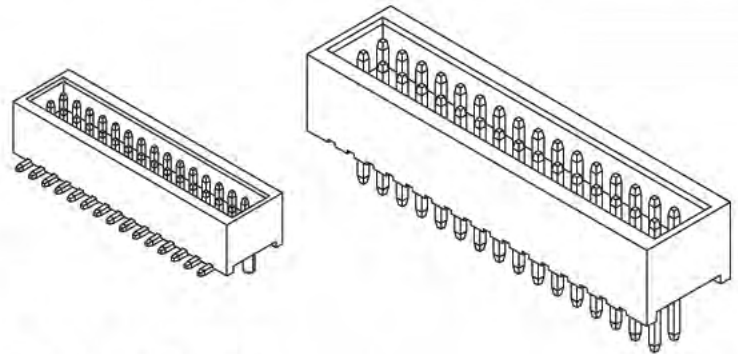
No. of Contacts Single/Dual	A		B		C		No. of Contacts Single/Dual	A		B		C	
	inch	mm	inch	mm	inch	mm		inch	mm	inch	mm	inch	mm
02/04*	0.100	2.54	0.200	5.08	N/A	N/A	21/42	2.000	50.80	2.100	53.34	1.900	48.26
03/06	0.200	5.08	0.300	7.62	0.100	2.54	22/44	2.100	53.34	2.200	55.88	2.000	50.80
04/08	0.300	7.62	0.400	10.16	0.200	5.08	23/46	2.200	55.88	2.300	58.42	2.100	53.34
05/10	0.400	10.16	0.500	12.70	0.300	7.62	24/48	2.300	58.42	2.400	60.96	2.200	55.88
06/12	0.500	12.70	0.600	15.24	0.400	10.16	25/50	2.400	60.96	2.500	63.50	2.300	58.42
07/14	0.600	15.24	0.700	17.78	0.500	12.70	26/52	2.500	63.50	2.600	66.04	2.400	60.96
08/16	0.700	17.78	0.800	20.32	0.600	15.24	27/54	2.600	66.04	2.700	68.58	2.500	63.50
09/18	0.800	20.32	0.900	22.86	0.700	17.78	28/56	2.700	68.58	2.800	71.12	2.600	66.04
10/20	0.900	22.86	1.000	25.40	0.800	20.32	29/58	2.800	71.12	2.900	73.66	2.700	68.58
11/22	1.000	25.40	1.100	27.94	0.900	22.86	30/60	2.900	73.66	3.000	76.20	2.800	71.12
12/24	1.100	27.94	1.200	30.48	1.000	25.40	31/62	3.000	76.20	3.100	78.74	2.900	73.66
13/26	1.200	30.48	1.300	33.02	1.100	27.94	32/64	3.100	78.74	3.200	81.28	3.000	76.20
14/28	1.300	33.02	1.400	35.56	1.200	30.48	33/66	3.200	81.28	3.300	83.82	3.100	78.74
15/30	1.400	35.56	1.500	38.10	1.300	33.02	34/68	3.300	83.82	3.400	86.36	3.200	81.28
16/32	1.500	38.10	1.600	40.64	1.400	35.56	35/70	3.400	86.36	3.500	88.90	3.300	83.82
17/34	1.600	40.64	1.700	43.18	1.500	38.10	36/72	3.500	88.90	3.600	91.44	3.400	86.36
18/36	1.700	43.18	1.800	45.72	1.600	40.64	37/74	3.600	91.44	3.700	93.98	3.500	88.90
19/38	1.800	45.72	1.900	48.26	1.700	43.18	38/76	3.700	93.98	3.800	96.52	3.600	91.44
20/40	1.900	48.26	2.000	50.80	1.800	45.72	39/78	3.800	96.52	3.900	99.06	3.700	93.98
							40/80	3.900	99.06	4.000	101.60	3.800	96.52



1.00mm [.039"] Contact Centers, Shrouded (Box) Headers Straight/SMT

SPECIFICATIONS

- Operating Temperature: - 40° C to + 125° C
- Processing Temperature: 230° C for 60 seconds Max.
(260° C, 10 seconds)
- UL Flammability Rating: 94V-0
- Voltage Rating: 20m OHMs Max.
- Current Rating: 1 AMP per contact
- Voltage Drop: AC 300 V.
- Insulation Resistance: 1000 Mega OHMS



PART NUMBER OPTIONS

SBH51 - L P P E - D 10 - ST - BK

SERIES SBH51 = Box Header	COLOR BK = Black
HOUSING MATERIAL L = LCP	TERMINATION TYPE ST = Straight SM = Surface Mount Without Post SP = Surface Mount With Post
CONTACT MATERIAL P = Phosphor Bronze	NUMBER OF CONTACT POSITIONS (Pins per Row) 03 thru 50
CONTACT FINISH - RoHS Compliant P = Gold Flash Overall S = .000010" Gold Overall	NUMBER OF ROWS D = Dual Row
CONTACT CENTERS E = 1.00mm [.039"]	

DIMENSIONS For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com

