Amphenol MF42 4.2 Power Wafer ROHS

MF42 - X X X - XX

MF42 Series
4.2mm Pitch

MF42-SP
ST w/Peg

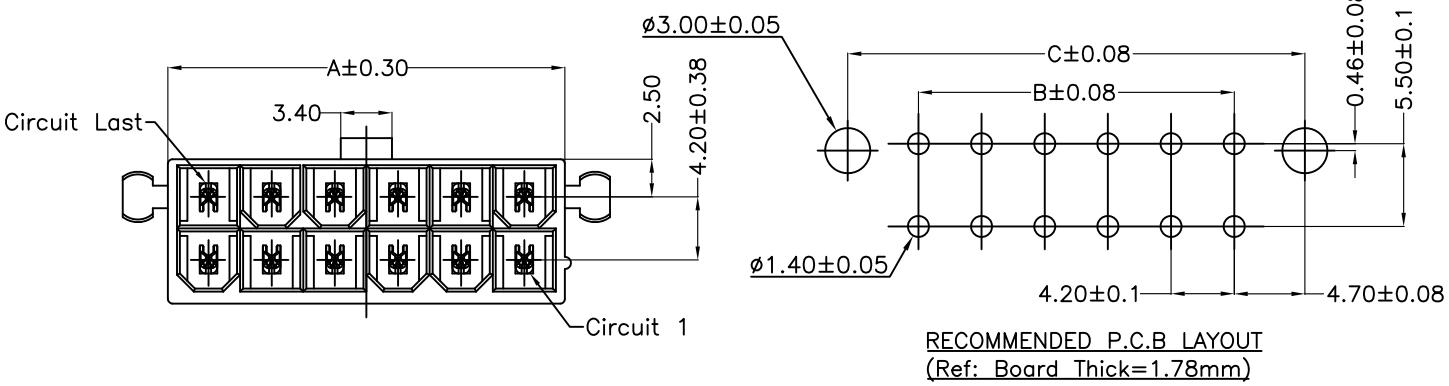
Type
S= Straight
R= R/A
H= Housing
or Contact

Wafer:
D= Dip only
P= w/Pegs
E= w/Ear hole
Housing:
M= Male
F= Female
Contact:
M= Male
F= Female

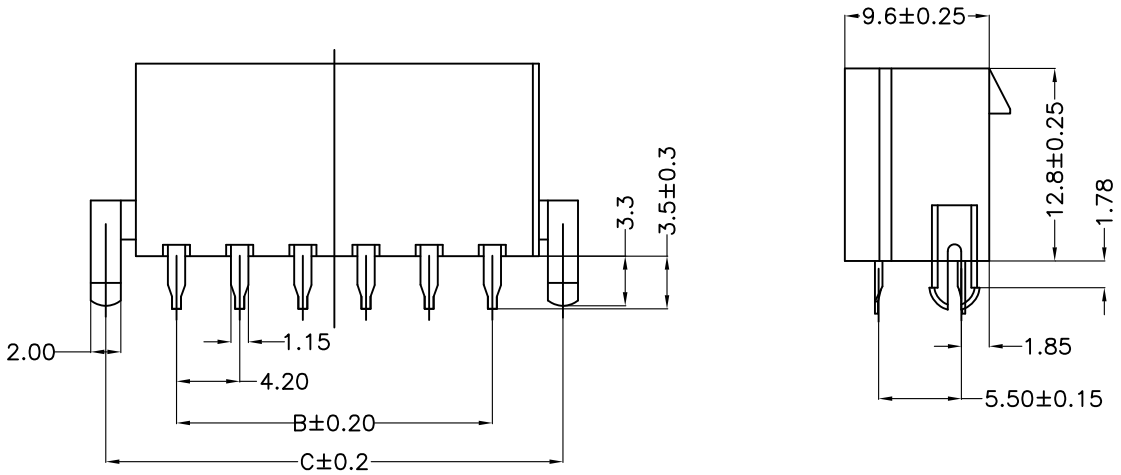
Wafer&Housing:
Blank
Contact:
T= Tin plated

No. of Positions
02~24

Circuits	Dim A	Dim B	Dim C	Circuits	Dim A	Dim B	Dim C
2	5.4	—	9.4	14	30.6	25.2	34.6
4	9.6	4.2	13.6	16	34.8	29.4	38.8
6	13.8	8.4	17.8	18	39.0	33.6	43.0
8	18.0	12.6	22.0	20	43.2	37.8	47.2
10	22.2	16.8	26.2	22	47.4	42.0	51.4
12	26.4	21.0	30.4	24	51.6	46.2	55.6



RECOMMENDED P.C.B LAYOUT
(Ref: Board Thick=1.78mm)



General Specification

Materials and Finish :

Insulator: Glass-reinforce thermoplastic, UL 94V-2, Nylon 66, Transparent white.
Contact : Brass, Tin plated.

Electrical :
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 600V AC/RMS 60Hz, DC

Environment :

Operating Temperature:
-40 degree C to +105 degree C

Amphenol MF42 4.2 Power Wafer ROHS

MF42 - **X** **X** **X** - **XX**

MF42 Series
4.2mm Pitch

MF42-SD
ST Dip

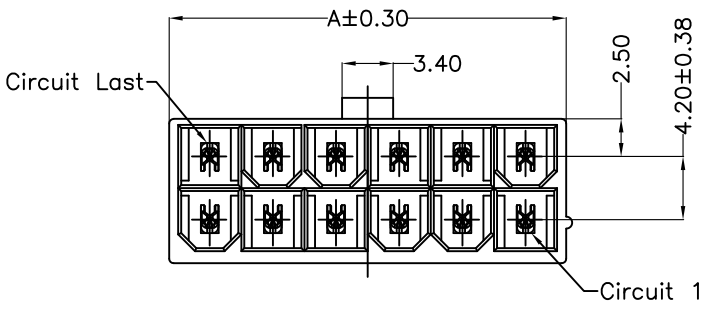
Type
S= Straight
R= R/A
H= Housing
or Contact

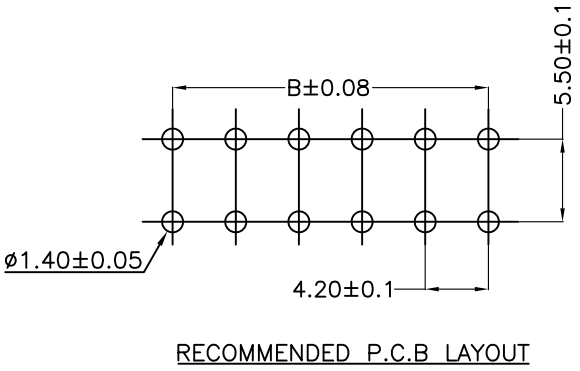
Wafer:
D= Dip only
P= w/Pegs
E= w/Ear hole
Housing:
M= Male
F= Female
Contact:
M= Male
F= Female

Wafer&Housing:
Blank
Contact:
T= Tin plated

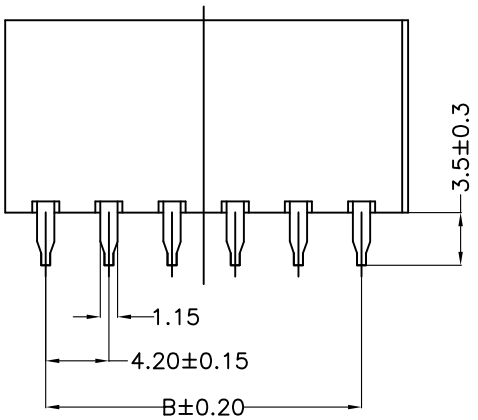
No. of Positions
02~24

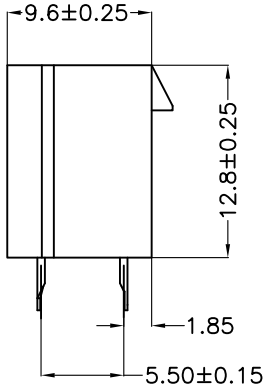
Circuits	Dim A	Dim B	Circuits	Dim A	Dim B
2	5.4	—	14	30.6	25.2
4	9.6	4.2	16	34.8	29.4
6	13.8	8.4	18	39.0	33.6
8	18.0	12.6	20	43.2	37.8
10	22.2	16.8	22	47.4	42.0
12	26.4	21.0	24	51.6	46.2





RECOMMENDED P.C.B LAYOUT





General Specification

Materials and Finish :

Insulator: Glass-reinforce thermoplastic, UL 94V-2, Nylon 66, Transparent white.
Contact : Brass, Tin plated.

Electrical :
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 600V AC/RMS 60Hz, DC

Environment :

Operating Temperature:
-40 degree C to +105 degree C

Amphenol MF42 4.2 Power Wafer ROHS

MF42 - X X X - XX

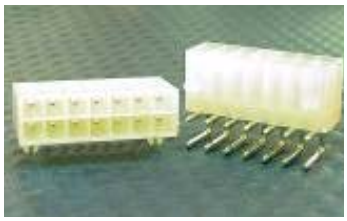
MF42 Series
4.2mm Pitch

Type
S= Straight
R= R/A
H= Housing
or Contact

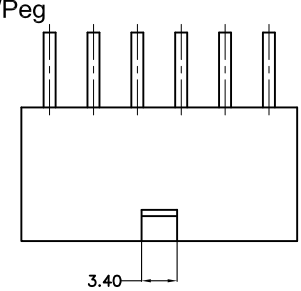
Wafer:
D= Dip only
P= w/Pegs
E= w/Ear hole
Housing:
M= Male
F= Female
Contact:
M= Male
F= Female

Wafer&Housing:
Blank
Contact:
T= Tin plated

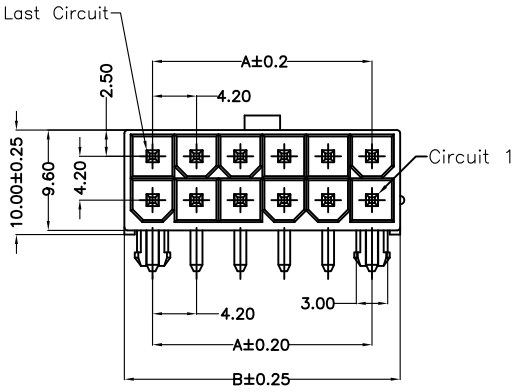
No. of Positions
02~24

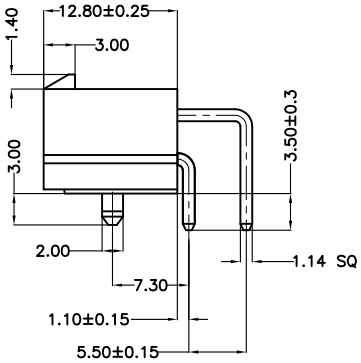


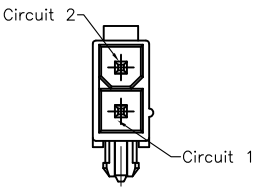
MF42-RP
R/A w/Peg



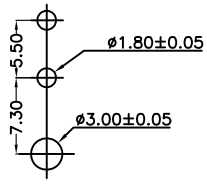
Circuits	Dim A	Dim B	Circuits	Dim A	Dim B
2	—	5.4	14	25.2	30.6
4	4.2	9.6	16	29.4	34.8
6	8.4	13.8	18	33.6	39.0
8	12.6	18.0	20	37.8	43.2
10	16.8	22.2	22	42.0	47.4
12	21.0	26.4	24	46.2	51.6



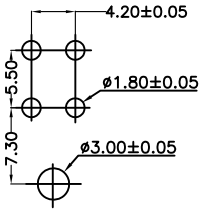




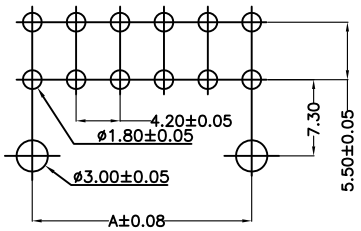
2 Pin



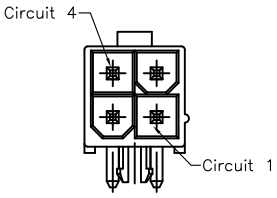
2 Pin



4 Pin



(6~24 Pin)



4 Pin

RECOMMENDED P.C.B LAYOUT

General Specification

Materials and Finish :

Insulator: Glass-reinforce thermoplastic, UL 94V-2, Nylon 66, Transparent white.
Contact : Brass, Tin plated.

Electrical :
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 600V AC/RMS 60Hz, DC

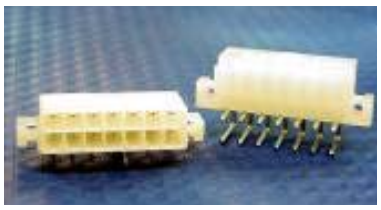
Environment :

Operating Temperature:
-40 degree C to +105 degree C

Amphenol MF42 4.2 Power Wafer ROHS

MF42 - **X** **X** **X** - **XX**

MF42 Series
4.2mm Pitch



MF42-RE
R/A w/Ear hole

Type
S= Straight
R= R/A
H= Housing
or Contact

Wafer:
D= Dip only
P= w/Pegs
E= w/Ear hole

Housing:
M= Male
F= Female

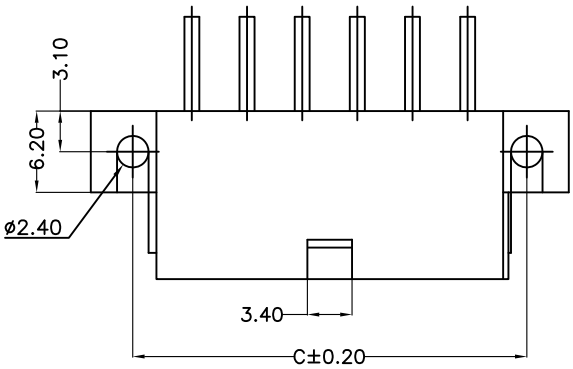
Contact:
M= Male
F= Female

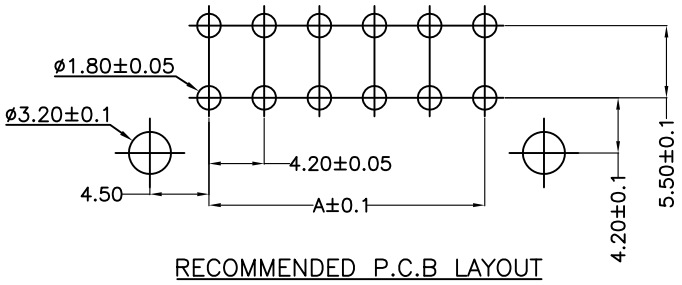
Wafer&Housing:
Blank

Contact:
T= Tin plated

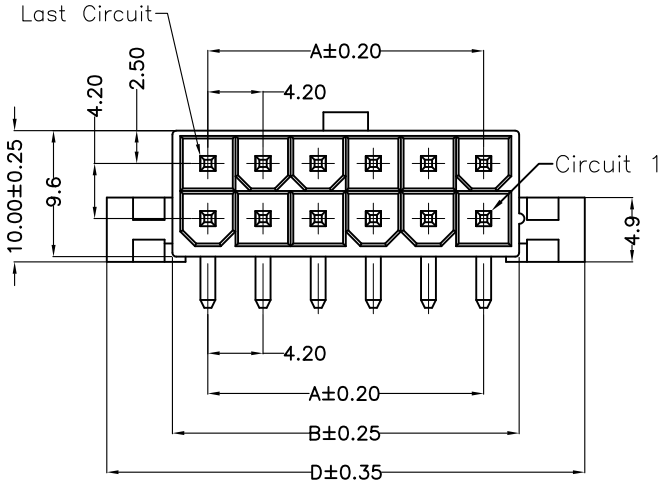
No. of Positions
02~24

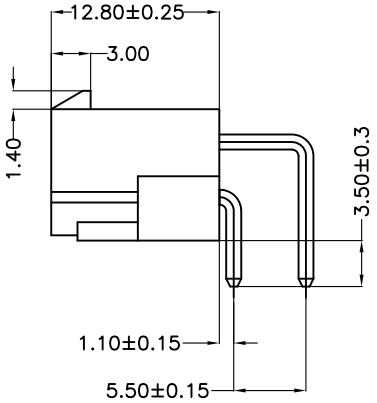
Circuits	Dim A	Dim B	Dim C	Dim D	Circuits	Dim A	Dim B	Dim C	Dim D
2	—	5.4	9.0	15.4	14	25.2	30.6	34.2	40.6
4	4.2	9.6	13.2	19.6	16	29.4	34.8	38.4	44.8
6	8.4	13.8	17.4	23.8	18	33.6	39.0	42.6	49.0
8	12.6	18.0	21.6	28.0	20	37.8	43.2	46.8	53.2
10	16.8	22.2	25.8	32.2	22	42.0	47.4	51.0	57.4
12	21.0	26.4	30.0	36.4	24	46.2	51.6	55.2	61.6





RECOMMENDED P.C.B LAYOUT





General Specification

Materials and Finish :

Insulator: Glass-reinforce thermoplastic, UL 94V-2, Nylon 66, Transparent white.
Contact : Brass, Tin plated.

Electrical :
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 600V AC/RMS 60Hz, DC

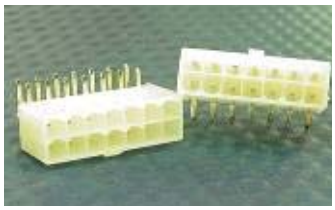
Environment :

Operating Temperature:
-40 degree C to +105 degree C

Amphenol MF42 4.2 Power Wafer ROHS

MF42 - X X X - XX

MF42 Series
4.2mm Pitch



MF42-RD
R/A Dip

Type
S= Straight
R= R/A
H= Housing
or Contact

Wafer:
D= Dip only
P= w/Pegs
E= w/Ear hole

Housing:
M= Male
F= Female

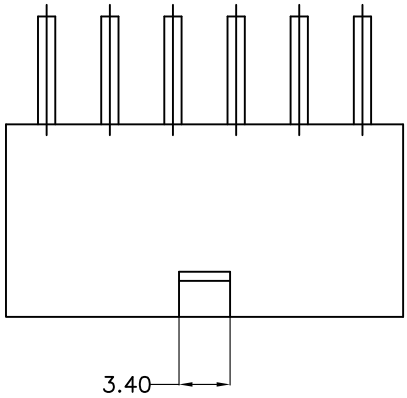
Contact:
M= Male
F= Female

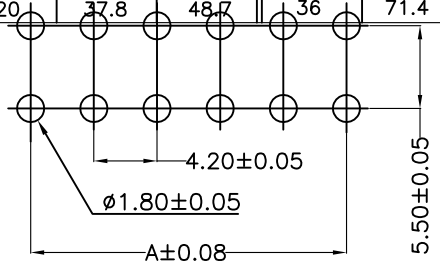
Wafer&Housing:
Blank

Contact:
T= Tin plated

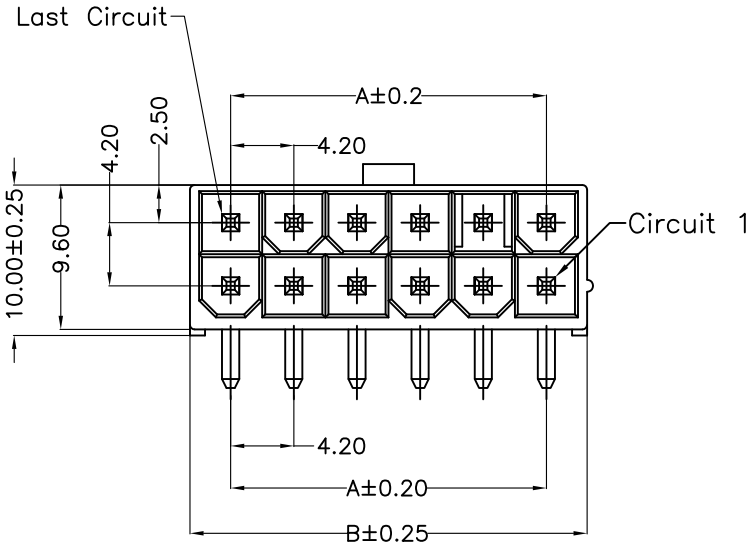
No. of Positions
02~24

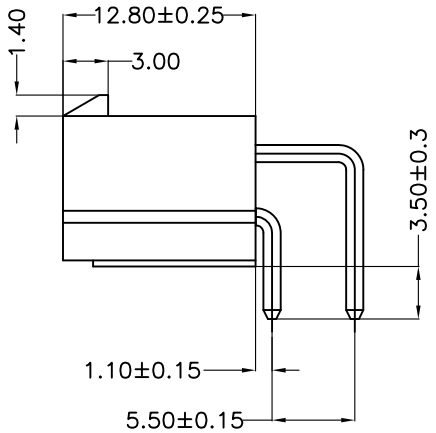
Circuits	Dim A	Dim B	Circuits	Dim A	Dim B
6	8.4	19.3	22	42.0	52.9
8	12.6	23.5	24	46.2	57.1
10	16.8	27.7	26	50.4	61.3
12	21.0	31.9	28	54.6	65.5
14	25.2	36.1	30	58.8	69.7
16	29.4	40.3	32	63.0	73.9
18	33.6	44.5	34	67.2	78.1
20	37.8	48.7	36	71.4	82.3





RECOMMENDED P.C.B LAYOUT





General Specification

Materials and Finish :

Insulator: Glass-reinforce thermoplastic, UL 94V-2, Nylon 66, Transparent white.
Contact : Brass, Tin plated.

Electrical :
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 600V AC/RMS 60Hz, DC

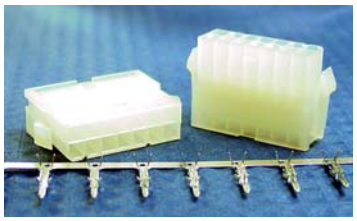
Environment :

Operating Temperature: -40 degree C to +105 degree C

Amphenol MF42 4.2 Power Wafer ROHS

MF42 - X X X - XX

MF42 Series
4.2mm Pitch



MF42-HM
Male Housing

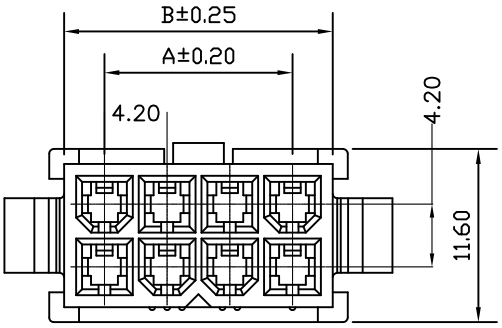
Type
S= Straight
R= R/A
H= Housing
or Contact

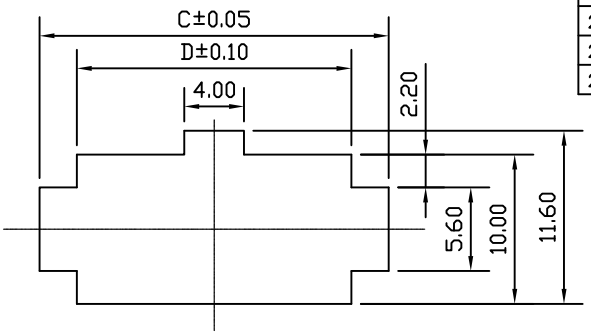
Wafer:
D= Dip only
P= w/Pegs
E= w/Ear hole
Housing:
M= Male
F= Female
Contact:
M= Male
F= Female

Wafer&Housing:
Blank
Contact:
T= Tin plated

No. of Positions
02~24

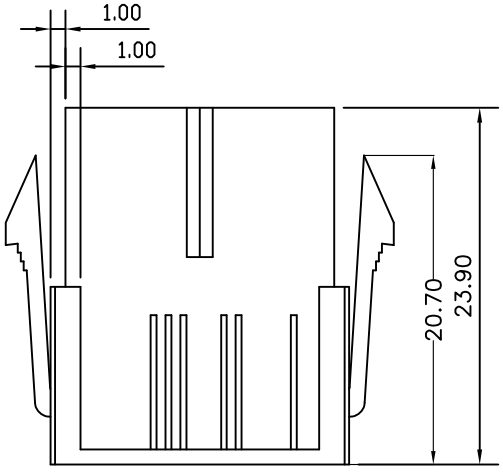
Pos	Dim.A	Dim.B	Dim.C	Dim.D
02	——	5.4	10.8	5.8
04	4.2	9.6	15.0	10.0
06	8.4	13.8	19.2	14.2
08	12.6	18.0	23.4	18.4
10	16.8	22.2	27.6	22.6
12	21.0	26.4	31.8	26.8
14	25.2	30.6	36.0	31.1
16	29.4	34.8	40.2	35.3
18	33.6	39.0	44.4	39.5
20	37.8	43.2	48.6	43.7
22	42.0	47.4	52.8	47.9
24	46.2	51.6	57.0	52.1

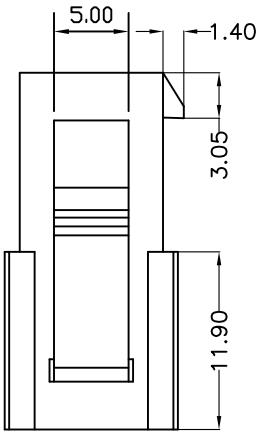


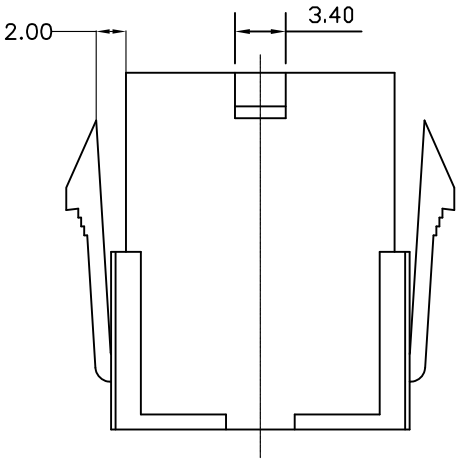


Recommended Panel Hole Dimension

Thickness:0.8~2.0







General Specification

Materials and Finish :

Insulator: Glass-reinforce thermoplastic, UL 94V-2, Nylon 66, Transparent white.
Contact : Brass, Tin plated.

Electrical(after assembled with MF42-HMT):
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 600V AC/RMS 60Hz, DC

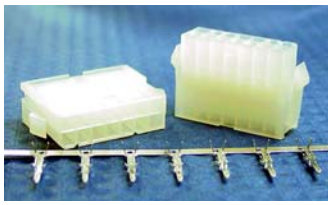
Environment :

Operating Temperature:
-40 degree C to +105 degree C

Amphenol MF42 4.2 Power Wafer ROHS

MF42 - **X** **X** **X** - **XX**

MF42 Series
4.2mm Pitch



MF42-HMT
Male Contact

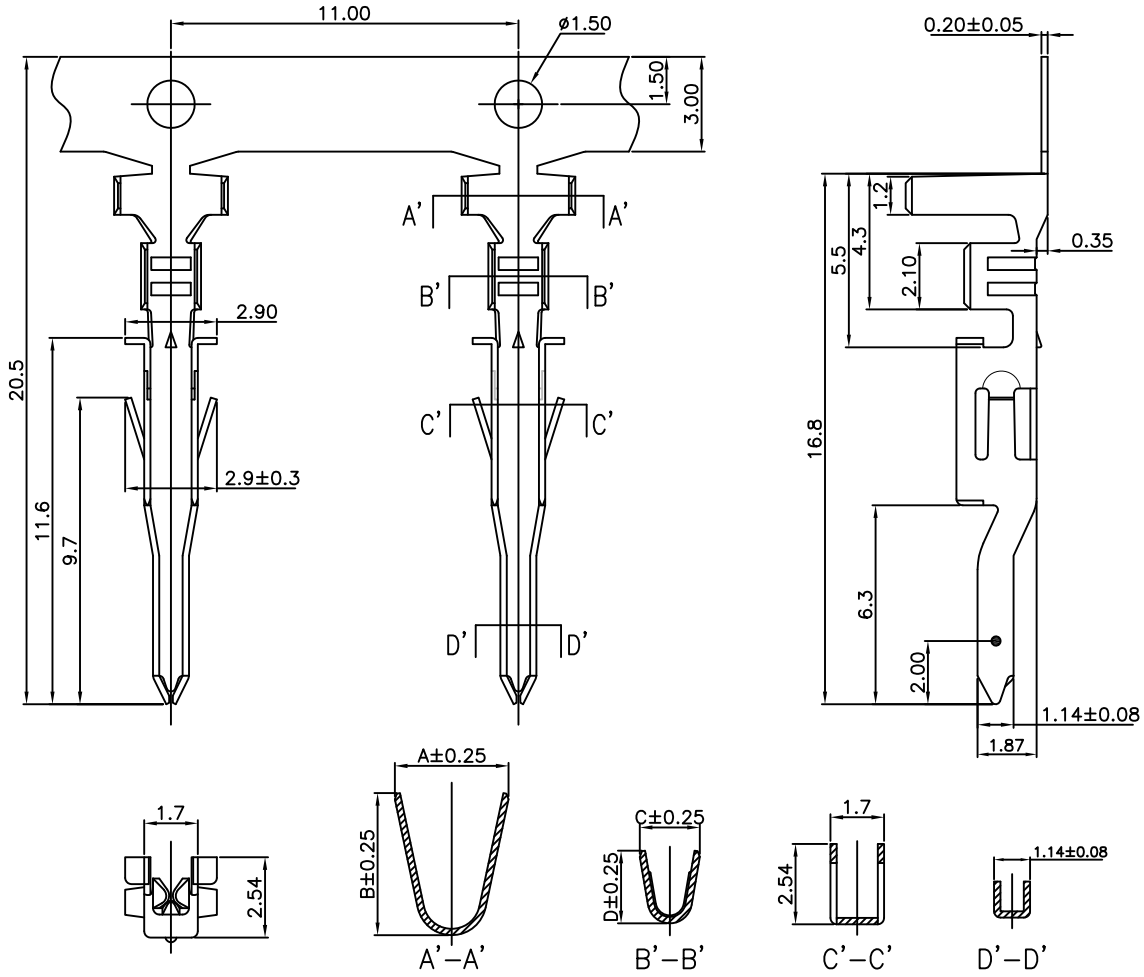
Type
S= Straight
R= R/A
H= Housing
or Contact

Wafer:
D= Dip only
P= w/Pegs
E= w/Ear hole
Housing:
M= Male
F= Female
Contact:
M= Male
F= Female

Wafer&Housing:
Blank
Contact:
T= Tin plated

No. of Positions
02~24

Wire Apply	A	B	C	D	INS. O.D.	Q'ty/Reel
16AWG	3.6	4.5	2.3	2.7	ø3.1MAX	4,000Pcs
18–24AWG	3.6	4.5	1.9	2.3	ø1.3–3.1	4,000Pcs
22–28AWG	2.3	2.3	1.8	1.65	ø0.9–1.8	5,000Pcs



General Specification

Materials and Finish :

Contact : Brass, T:0.2mm
Finish: Tin plated
Applicable wires: AWG# 18~24

Electrical(after assembled with MF42-HM):
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 600V AC/RMS 60Hz, DC

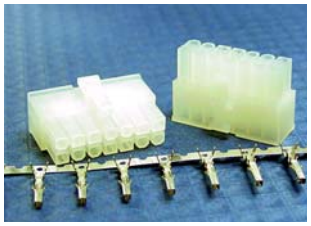
Environment :

Operating Temperature:
-40 degree C to +105 degree C

Amphenol MF42 4.2 Power Wafer ROHS

MF42 - **X** **X** **X** - **XX**

MF42 Series
4.2mm Pitch



MF42-HF
Female Housing

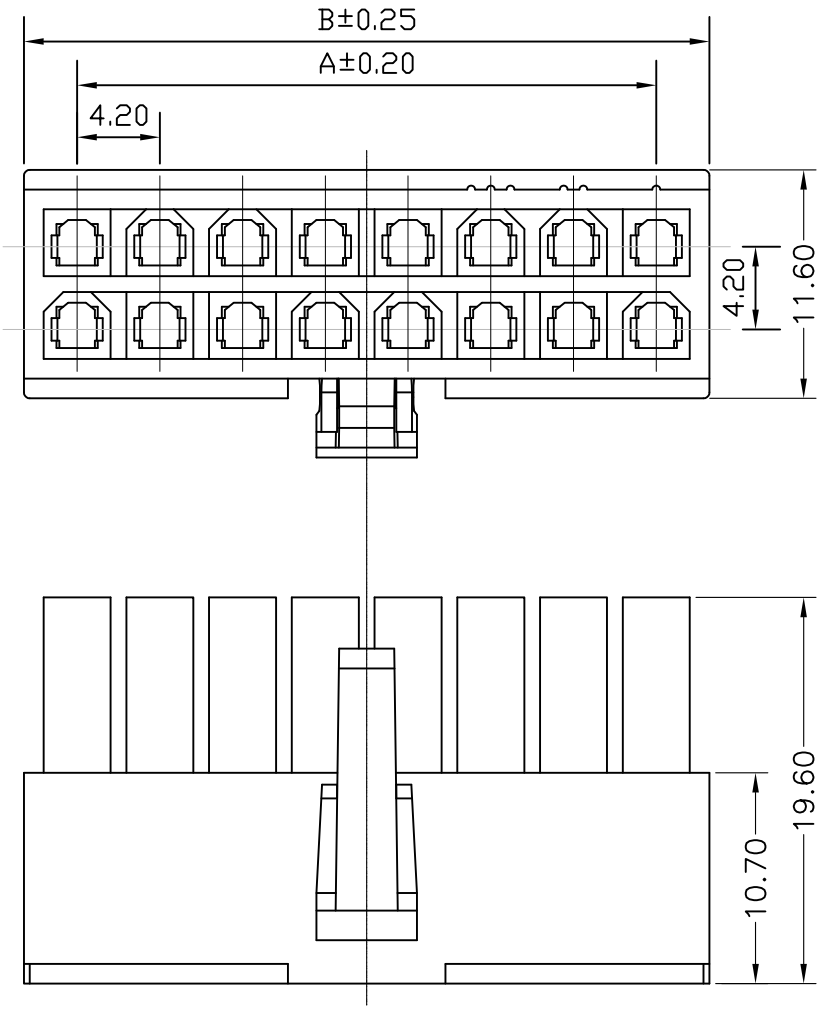
Type
S= Straight
R= R/A
H= Housing
or Contact

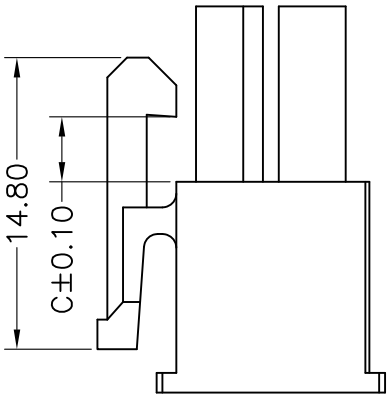
Wafer:
D= Dip only
P= w/Pegs
E= w/Ear hole
Housing:
M= Male
F= Female
Contact:
M= Male
F= Female

Wafer&Housing:
Blank
Contact:
T= Tin plated

No. of Positions
02~24

Circuits	DIM.A	DIM.B	DIM.C
2		5.40	3.30
4	4.20	9.60	3.30
6	8.40	13.80	3.30
8	12.60	18.00	3.30
10	16.80	22.20	3.30
12	21.00	26.40	3.30
14	25.20	30.60	3.30
16	29.40	34.80	3.30
18	33.60	39.00	3.60
20	37.80	43.20	3.60
22	42.00	47.40	3.60
24	46.20	51.60	3.60





General Specification

Materials and Finish :

Insulator: Glass-reinforce thermoplastic, UL 94V-2, Nylon 66, Transparent white.
Contact : Brass, Tin plated.

Electrical(after assembled with MF42-HFT):
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 900V AC/RMS 60Hz, DC

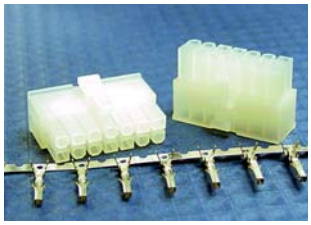
Environment :

Operating Temperature:
-40 degree C to +105 degree C

Amphenol MF42 4.2 Power Wafer ROHS

MF42 - X X X - XX

MF42 Series
4.2mm Pitch



MF42-HFT
Female Contact

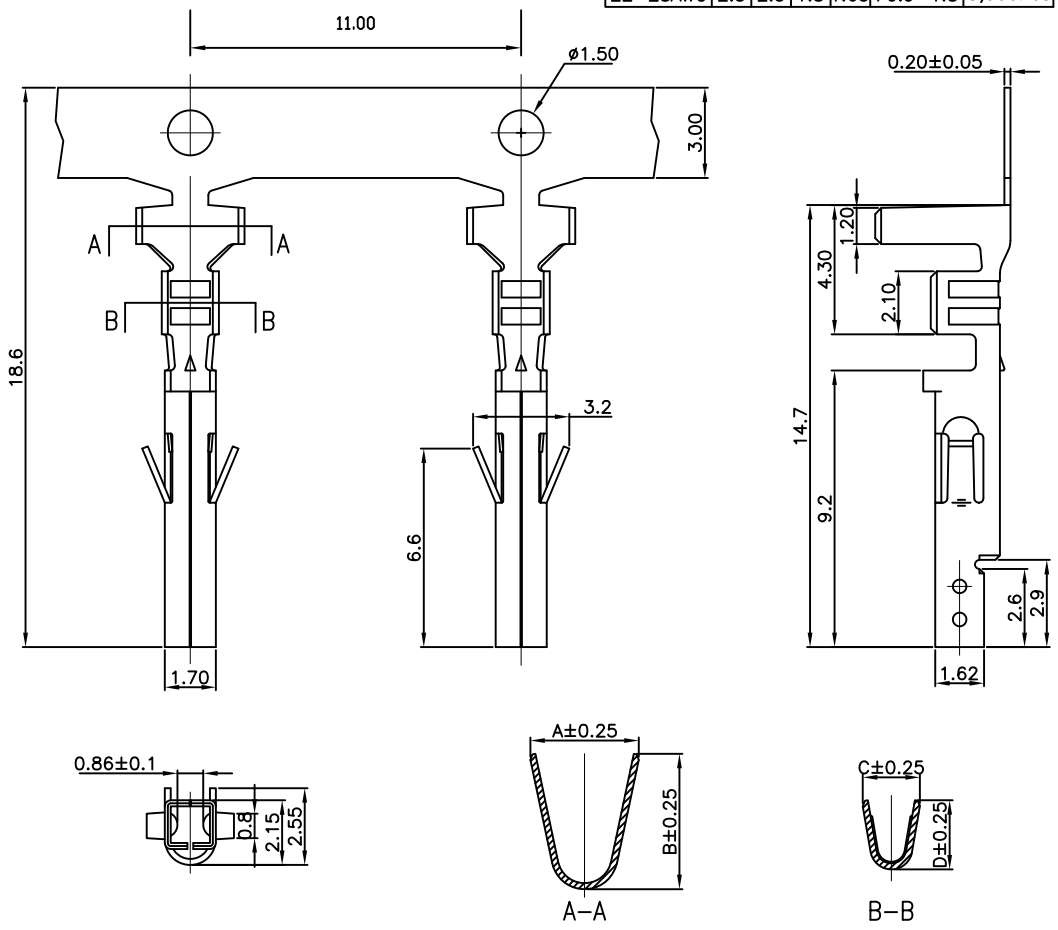
Type
S= Straight
R= R/A
H= Housing
or Contact

Wafer:
D= Dip only
P= w/Pegs
E= w/Ear hole
Housing:
M= Male
F= Female
Contact:
M= Male
F= Female

Wafer&Housing:
Blank
Contact:
T= Tin plated

No. of Positions
02~24

Wire Apply	A	B	C	D	INS. O.D.	Q'ty/Reel
16AWG	3.6	4.5	2.3	2.7	ø3.1MAX	4,000Pcs
18–24AWG	3.6	4.5	1.9	2.3	ø1.3–3.1	4,000Pcs
22–28AWG	2.3	2.3	1.8	1.65	ø0.9–1.8	5,000Pcs



General Specification

Materials and Finish :

Contact : Brass, T:0.2mm
Finish: Tin plated
Applicable wires: AWG# 18~24

Electrical(after assembled with MF42-HF):
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 600V AC/RMS 60Hz, DC

Environment :

Operating Temperature:
-40 degree C to +105 degree C

Amphenol MF42 4.2 Power Wafer ROHS

MF42L - **X** **X** **X** - **XX**

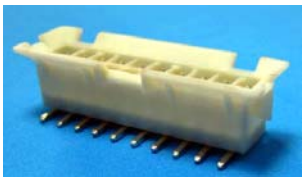
MF42 Series 4.2mm Pitch with Guide Lip

Type
S= Straight
R= R/A
H= Housing or Contact

Wafer:
P= Dip w/Pegs
S= SMT w/o Pegs

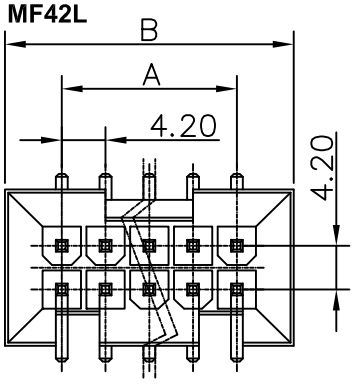
Wafer&Housing:
Blank
Contact:
T= Tin plated

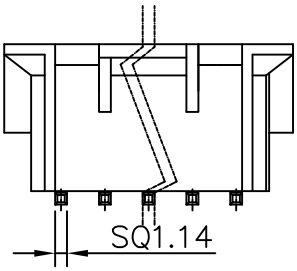
No. of Positions
06~36

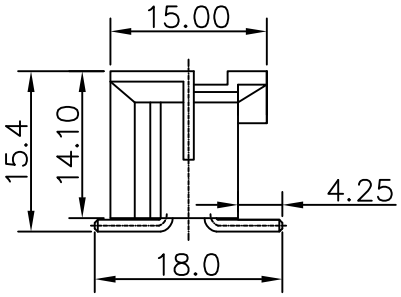


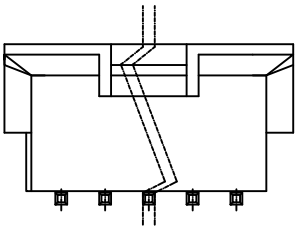
Circuits	Dim A	Dim B	Circuits	Dim A	Dim B
6	8.4	19.3	22	42.0	52.9
8	12.6	23.5	24	46.2	57.1
10	16.8	27.7	26	50.4	61.3
12	21.0	31.9	28	54.6	65.5
14	25.2	36.1	30	58.8	69.7
16	29.4	40.3	32	63.0	73.9
18	33.6	44.5	34	67.2	78.1
20	37.8	48.7	36	71.4	82.3

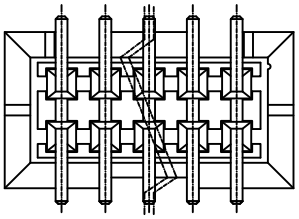
MF42L

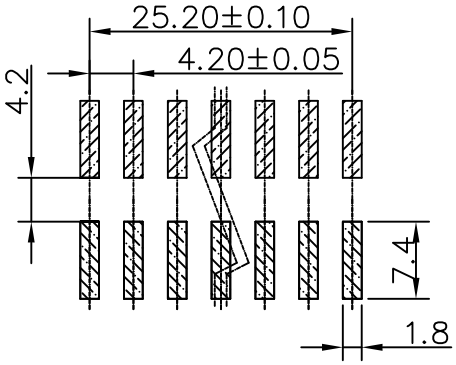












RECOMMENDED PCB LAYOUT

General Specification

Materials and Finish :

Insulator: Glass-reinforce thermoplastic, UL 94V-0, Nylon , Transparent white.
Contact : Brass, Tin plated.

Electrical:
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 600V AC/RMS 60Hz, DC

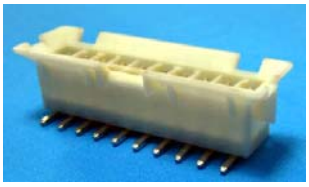
Environment :

Operating Temperature: -40 degree C to +105 degree C

Amphenol MF42 4.2 Power Wafer ROHS

MF42L - **X** **X** **X** - **XX**

MF42 Series 4.2mm Pitch with Guide Lip



Type
S= Straight
R= R/A
H= Housing or Contact

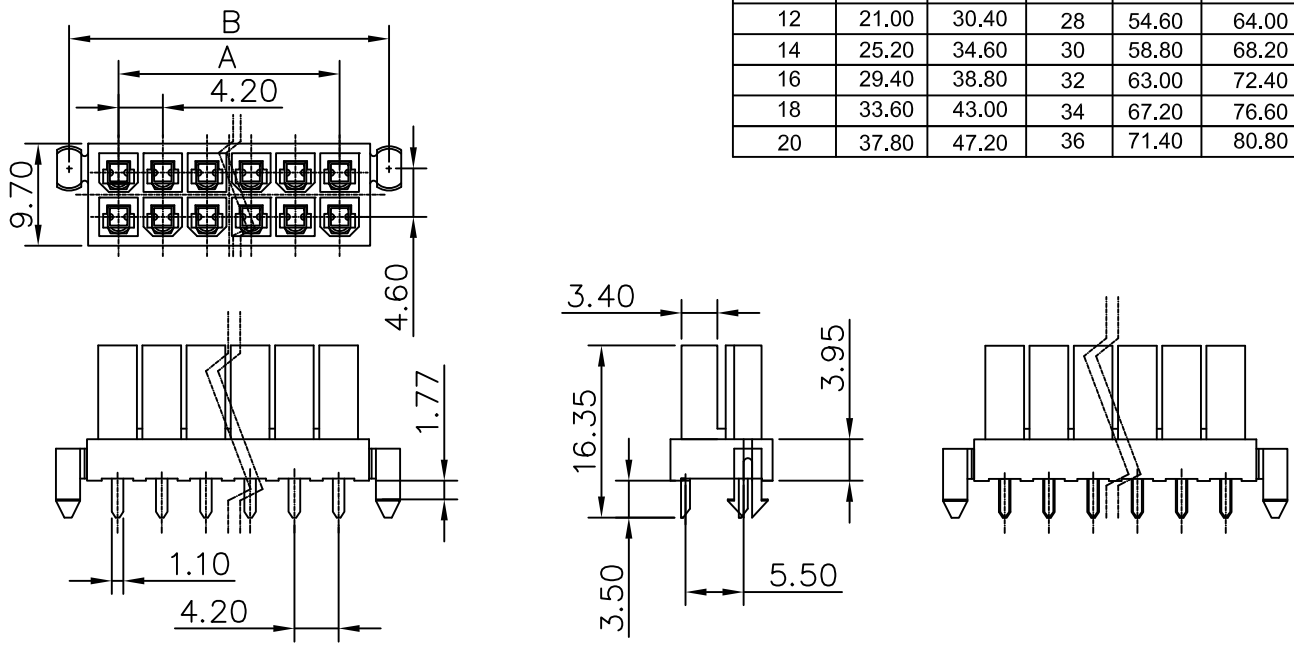
Wafer:
P= Dip w/Pegs
S= SMT w/o Pegs

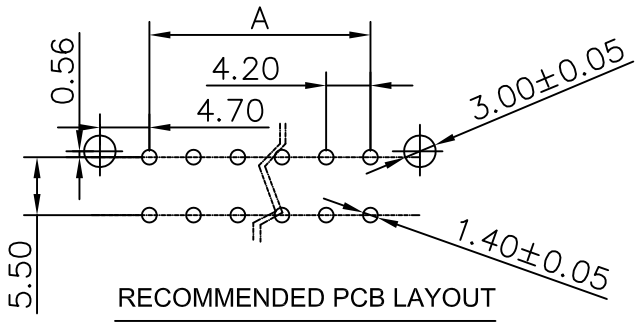
Wafer&Housing:
Blank
Contact:
T= Tin plated

No. of Positions
06~36

Circuits	Dim A	Dim B	Circuits	Dim A	Dim B
06	8.40	17.80	22	42.00	51.40
08	12.60	22.00	24	46.20	55.60
10	16.80	26.20	26	50.40	59.80
12	21.00	30.40	28	54.60	64.00
14	25.20	34.60	30	58.80	68.20
16	29.40	38.80	32	63.00	72.40
18	33.60	43.00	34	67.20	76.60
20	37.80	47.20	36	71.40	80.80

MF42L





RECOMMENDED PCB LAYOUT

General Specification

Materials and Finish :

Insulator: Glass-reinforce thermoplastic, UL 94V-0, Nylon , Transparent white.
Contact : Brass, Tin plated.

Electrical:
Contact Resistance: 10 mΩ max. at 1A DC
Insulation Resistance: 1000 MΩ min, at 500 V/DC.
Dielectric Withstanding Voltage : 1500 V AC/RMS 60Hz for one minute.
Current Rating : 9A AC, DC
Voltage Rating : 600V AC/RMS 60Hz, DC

Environment :

Operating Temperature: -40 degree C to +105 degree C