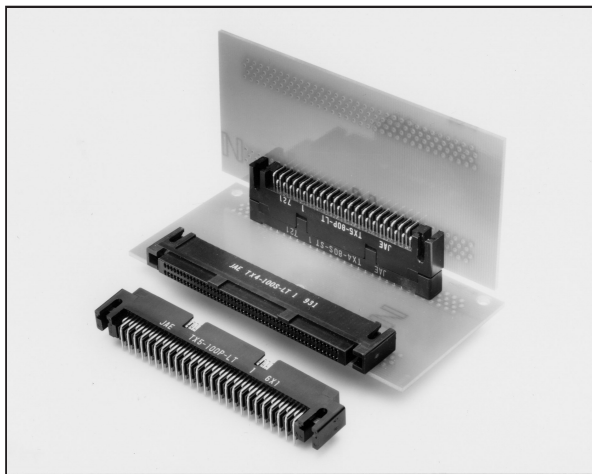


TX4/TX5 SERIES CONNECTORS

1.27mm (.050") Contact Spacing, PCB-to-PCB Connectors

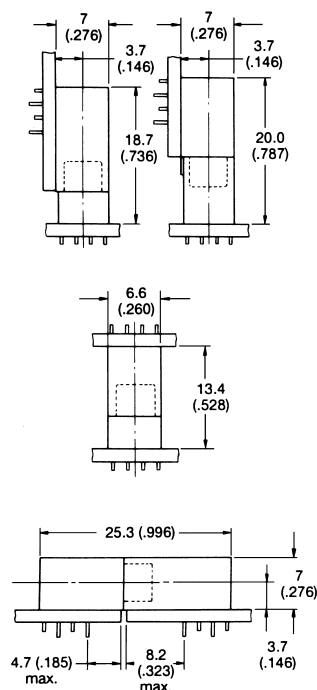


FEATURES

■ Socket Receptacle (TX4) and Pin Header (TX5)

- Horizontal, parallel and vertical board-to-board connections
- Straight and right angle through hole types are available in both receptacle and pin header
- Available with/without mounting ears

Connector Profile (Ref.)



• • • • •

TX4 and TX5 Series connectors are two-piece PCB connectors with 1.27mm (.050") contact spacing.

They are designed for board-to-board connections.

Configurations include; socket receptacles (TX4) and pin headers (TX5) for horizontal, parallel and vertical board-to-board connections.

Applications include computers, business machines, industrial control machinery, telecommunications, audiovisual appliances, measuring equipment, and applications wherever high density packaging is required.

GENERAL SPECIFICATIONS

Number of Contacts	20, 26, 30, 34, 40, 50, 60, 68, 80, 100
Contact Spacing	1.27mm (.050"), Double row
Current Rating	0.5 Amps
Operating Voltage	250 VAC r.m.s.
Dielectric Withstanding Voltage	500 VAC r.m.s. (for one minute)
Insulation Resistance	100 megohms min.
Contact Resistance	25 milliohms max.
Operating Temperature	-40°C to + 80°C
Applicable PCB Thickness	1.6mm (.063")
Applicable F.R.C.: TX1 TX2	0.635mm (.025") pitch: #30 AWG 1.27mm (.050") pitch: #28 AWG

MATERIALS AND FINISHES

Description	Materials/Finishes
Insulator	PBT (UL94V-0, Black)
Expansion Post	Phosphor Bronze/Tin plating
Contact (Note)	Phosphor Bronze Connecting area: Gold plating over Nickel Terminal area: Tin plating

Note: Contact finish – Gold plating on connecting area is 0.1µm (.000004") min.

Dimensions in mm (inches).

TX4/TX5 SERIES CONNECTORS

1.27mm (.050") Contact Spacing, PCB-to-PCB Connectors

ORDERING INFORMATION

	TX	*	-	**	D	-	D2	**	**	*
Series	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Connector Type	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
4 – Socket Receptacle										
5 – Pin Header										
No. of Contacts	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
20, 26, 30, 34, 40, 50, 60, 68, 80, 100										
Contact Type	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
P – Pin (TX3, TX5)										
Contact Arrangement	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
D2 – Double Row										
Termination	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
LT – Right Angle Through Hole										
ST – Straight Through Hole										
Mounting Method	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
MH – With Mounting Ears and Expansion Posts										
MN – With Mounting Ears and Without Expansion Posts										
N – Without Mounting Ears and Expansion Posts										
Contact Finish Code	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
1 – 0.1µm (.000004") gold plating min.										

Dimensions in mm (inches).

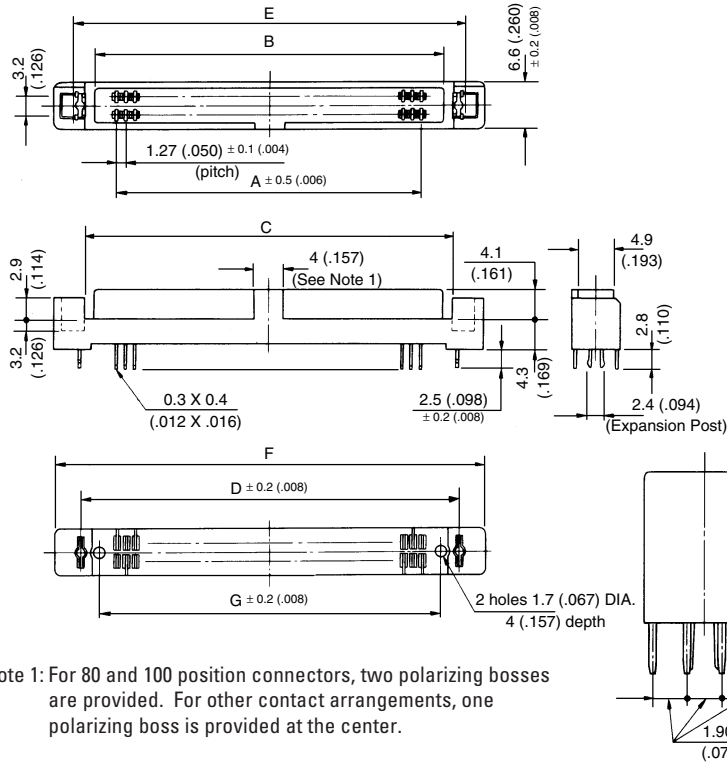
TX4/TX5 SERIES CONNECTORS

1.27mm (.050") Contact Spacing, PCB-to-PCB Connectors

SOCKET RECEPTACLE (With Mounting Ears)

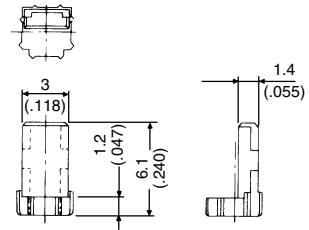
TX4-ST-M—Straight Through Hole Type

With Expansion Posts (H)

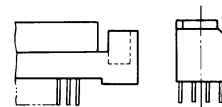


POLARIZATION KEY: 201-50054

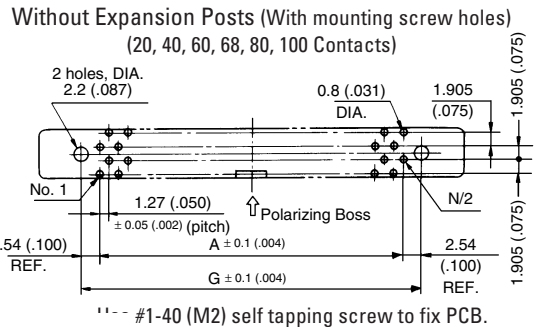
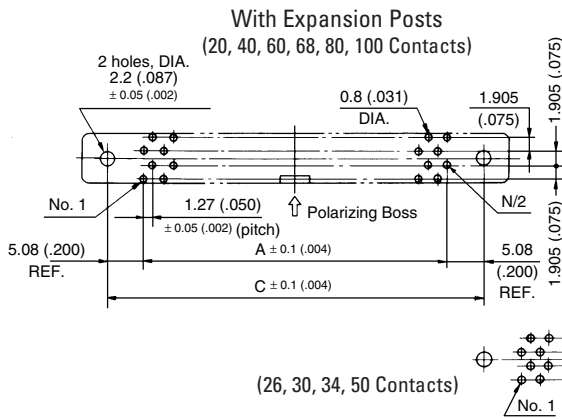
MATERIAL: Glass-filled PBT (Yellow-green)
Installed in the connector mounting ears, these keys will allow 16 different polarization schemes.



Without Expansion Posts (N)



PCB Hole Pattern



No. of Contacts	Part Number		A	B +0 (+0.000) -0.2 (-0.008)	C +0.2 (+0.008) -0.1 (-0.004)	D	E ± 0.2 (± .008)	F ± 0.4 (± .016)	G
	With Expansion Post	Without Expansion Post							
20	TX4- 20S-D2ST-MH1	TX4- 20S-D2ST-MN1	11.43 (.450)	17.43 (.686)	20.23 (.796)	21.59 (.850)	23.23 (.915)	28.6 (1.126)	16.51 (.650)
26	TX4- 26S-D2ST-MH1	TX4- 26S-D2ST-MN1	15.24 (.600)	21.24 (.836)	24.04 (.946)	25.40 (1.000)	27.04 (1.065)	32.4 (1.276)	20.32 (.800)
30	TX4- 30S-D2ST-MH1	TX4- 30S-D2ST-MN1	17.78 (.700)	23.78 (.936)	26.58 (1.046)	27.94 (1.100)	29.58 (1.165)	35.0 (1.378)	22.86 (.900)
34	TX4- 34S-D2ST-MH1	TX4- 34S-D2ST-MN1	20.32 (.800)	26.32 (1.036)	29.12 (1.146)	30.48 (1.200)	32.12 (1.265)	37.5 (1.476)	25.40 (1.000)
40	TX4- 40S-D2ST-MH1	TX4- 40S-D2ST-MN1	24.13 (.950)	30.13 (1.186)	32.93 (1.296)	34.29 (1.350)	35.93 (1.415)	41.3 (1.626)	29.21 (1.150)
50	TX4- 50S-D2ST-MH1	TX4- 50S-D2ST-MN1	30.48 (1.200)	36.48 (1.436)	39.28 (1.546)	40.64 (1.600)	42.28 (1.665)	47.7 (1.878)	35.56 (1.400)
60	TX4- 60S-D2ST-MH1	TX4- 60S-D2ST-MN1	36.83 (1.450)	42.83 (1.686)	45.63 (1.796)	46.99 (1.850)	48.63 (1.915)	54.0 (2.126)	41.91 (1.650)
68	TX4- 68S-D2ST-MH1	TX4- 68S-D2ST-MN1	41.91 (1.650)	47.91 (1.886)	50.71 (1.996)	52.07 (2.050)	53.71 (2.115)	59.1 (2.327)	46.99 (1.850)
80	TX4- 80S-D2ST-MH1	TX4- 80S-D2ST-MN1	49.53 (1.950)	55.53 (2.186)	58.33 (2.296)	59.69 (2.350)	61.33 (2.415)	66.7 (2.626)	54.61 (2.150)
100	TX4-100S-D2ST-MH1	TX4-100S-D2ST-MN1	62.23 (2.450)	68.23 (2.686)	71.03 (2.796)	72.39 (2.850)	74.03 (2.915)	79.4 (3.126)	67.31 (2.650)

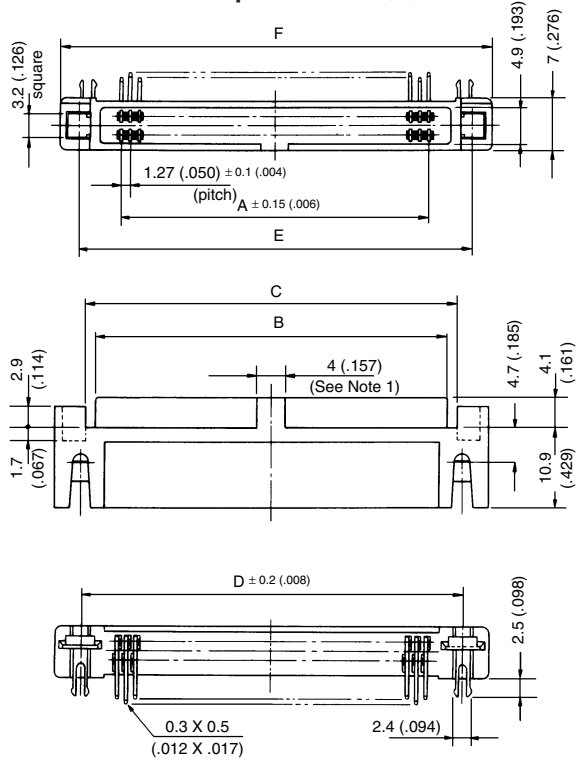
Dimensions in mm (inches).

TX4/TX5 SERIES CONNECTORS

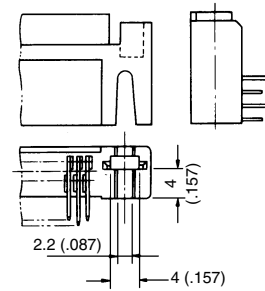
1.27mm (.050") Contact Spacing, PCB-to-PCB Connectors

SOCKET RECEPTACLE (With Mounting Ears) TX4-LT-M—Right Angle Through Hole Type

With Expansion Posts (H)

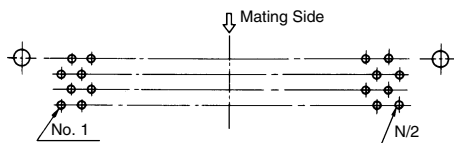


Without Expansion Posts (N)



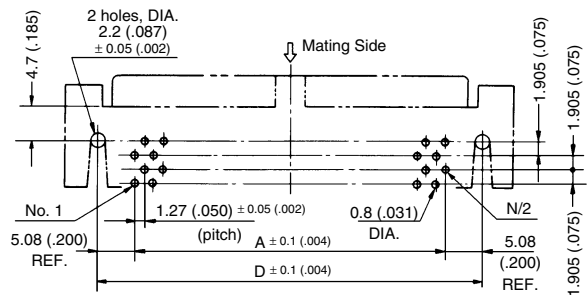
Note 1: For 80 and 100 position connectors, two polarizing bosses are provided. For other contact arrangements, one polarizing boss is provided at the center.

(26, 30, 34, 50 Contacts)



PCB Hole Pattern

(20, 40, 60, 68, 80, 100 Contacts)



No. of Contacts	Part Number		A	B +0 (+.000) -0.2 (-.008)	C +0.2 (+.008) -0.1 (-.004)	D	E ± 0.2 (± .008)	F ± 0.4 (± .016)
	With Expansion Post	Without Expansion Post						
20	TX4- 20S-D2LT-MH1	TX4- 20S-D2LT-MN1	11.43 (.450)	17.43 (.686)	20.23 (.796)	21.59 (.850)	23.23 (.915)	28.6 (1.126)
26	TX4- 26S-D2LT-MH1	TX4- 26S-D2LT-MN1	15.24 (.600)	21.24 (.836)	24.04 (.946)	25.40 (1.000)	27.04 (1.065)	32.4 (1.276)
30	TX4- 30S-D2LT-MH1	TX4- 30S-D2LT-MN1	17.78 (.700)	23.78 (.936)	26.58 (1.046)	27.94 (1.100)	29.58 (1.165)	35.0 (1.378)
34	TX4- 34S-D2LT-MH1	TX4- 34S-D2LT-MN1	20.32 (.800)	26.32 (1.036)	29.12 (1.146)	30.48 (1.200)	32.12 (1.265)	37.5 (1.476)
40	TX4- 40S-D2LT-MH1	TX4- 40S-D2LT-MN1	24.13 (.950)	30.13 (1.186)	32.93 (1.296)	34.29 (1.350)	35.93 (1.415)	41.3 (1.626)
50	TX4- 50S-D2LT-MH1	TX4- 50S-D2LT-MN1	30.48 (1.200)	36.48 (1.436)	39.28 (1.546)	40.64 (1.600)	42.28 (1.665)	47.7 (1.878)
60	TX4- 60S-D2LT-MH1	TX4- 60S-D2LT-MN1	36.83 (1.450)	42.83 (1.686)	45.63 (1.796)	46.99 (1.850)	48.63 (1.915)	54.0 (2.126)
68	TX4- 68S-D2LT-MH1	TX4- 68S-D2LT-MN1	41.91 (1.650)	47.91 (1.886)	50.71 (1.996)	52.07 (2.050)	53.71 (2.115)	59.1 (2.327)
80	TX4- 80S-D2LT-MH1	TX4- 80S-D2LT-MN1	49.53 (1.950)	55.53 (2.186)	58.33 (2.296)	59.69 (2.350)	61.33 (2.415)	66.7 (2.626)
100	TX4- 100S-D2LT-MH1	TX4- 100S-D2LT-MN1	62.23 (2.450)	68.23 (2.686)	71.03 (2.796)	72.39 (2.850)	74.03 (2.915)	79.4 (3.126)

Dimensions in mm (inches).

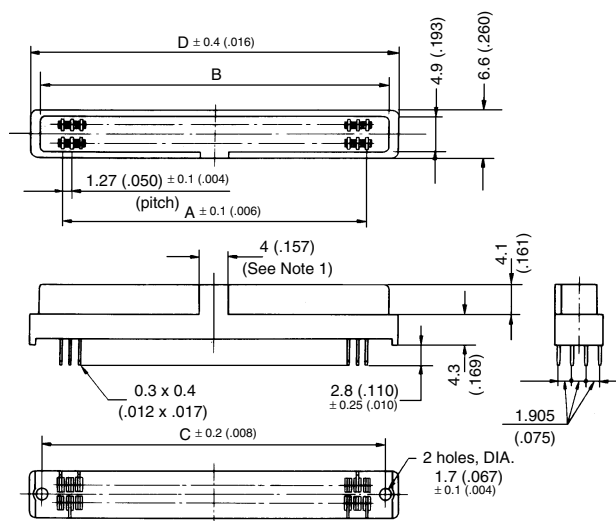
TX4/TX5 SERIES CONNECTORS

1.27mm (.050") Contact Spacing, PCB-to-PCB Connectors

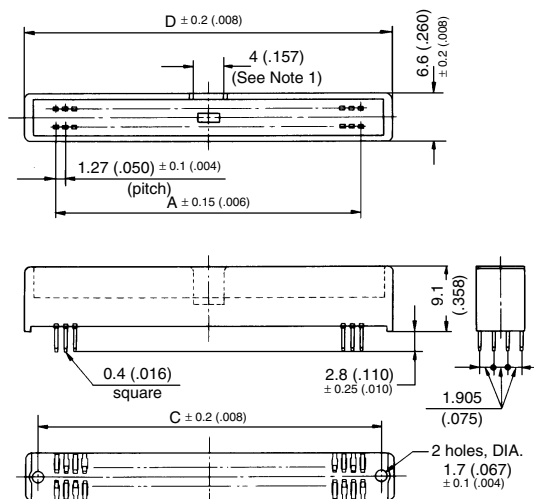
SOCKET RECEPTACLE & PIN HEADER (Without Mounting Ears)

TX4-ST/TX5-ST—Straight Through Hole Type

TX4: Socket Receptacle (Without Expansion Posts)



TX5: Pin Header (Without Expansion Posts)



Note 1: For 80 and 100 position connectors, two polarizing bosses/keyways are provided. For other contact arrangements, one polarizing boss/keyway is provided at the center.

PCB Hole Pattern

TX4: See TX4-LJ-M

TX5: See TX5-ST-M and TX5-LT-M

No. of Contacts	Part Number		A	B	C	D
	TX4-Socket Receptacle	TX5-Pin Header				
20	TX4- 20S-D2ST-N1	TX5- 20P-D2ST-N1	11.43 (.450)	17.43 (.686)	16.51 (.650)	20.0 (.787)
26	TX4- 26S-D2ST-N1	TX5- 26P-D2ST-N1	15.24 (.600)	21.24 (.836)	20.32 (.800)	23.8 (.937)
30	TX4- 30S-D2ST-N1	TX5- 30P-D2ST-N1	17.78 (.700)	23.78 (.936)	22.86 (.900)	26.4 (1.039)
34	TX4- 34S-D2ST-N1	TX5- 34P-D2ST-N1	20.32 (.800)	26.32 (1.036)	25.40 (1.000)	28.9 (1.138)
40	TX4- 40S-D2ST-N1	TX5- 40P-D2ST-N1	24.13 (.950)	30.13 (1.186)	29.21 (1.150)	32.7 (1.287)
50	TX4- 50S-D2ST-N1	TX5- 50P-D2ST-N1	30.48 (1.200)	36.48 (1.436)	35.56 (1.400)	39.1 (1.539)
60	TX4- 60S-D2ST-N1	TX5- 60P-D2ST-N1	36.83 (1.450)	42.83 (1.686)	41.91 (1.650)	45.4 (1.787)
68	TX4- 68S-D2ST-N1	TX5- 68P-D2ST-N1	41.91 (1.650)	47.91 (1.886)	46.99 (1.850)	50.5 (1.988)
80	TX4- 80S-D2ST-N1	TX5- 80P-D2ST-N1	49.53 (1.950)	55.53 (2.186)	54.61 (2.150)	58.1 (2.287)
100	TX4- 100S-D2ST-N1	TX5- 100P-D2ST-N1	62.23 (2.450)	68.23 (2.686)	67.31 (2.650)	70.8 (2.787)

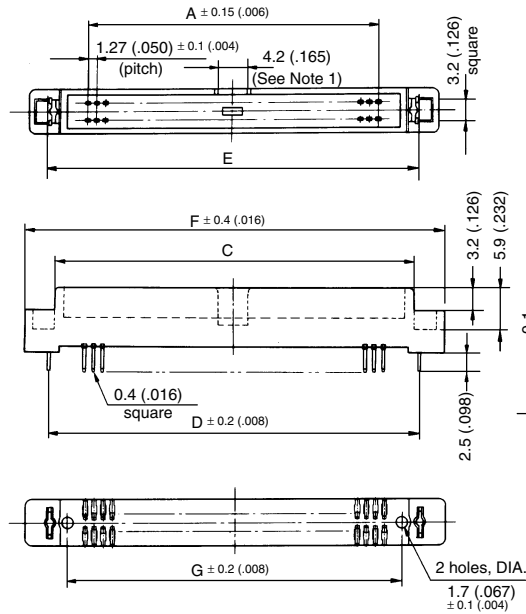
Dimensions in mm (inches).

TX4/TX5 SERIES CONNECTORS

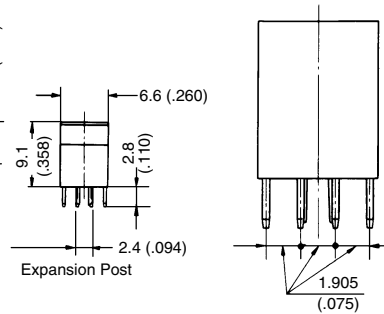
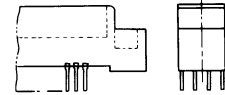
1.27mm (.050") Contact Spacing, PCB-to-PCB Connectors

PIN HEADER (With Mounting Ears) TX5-ST-M—Straight Through Hole Type

With Expansion Posts (H)



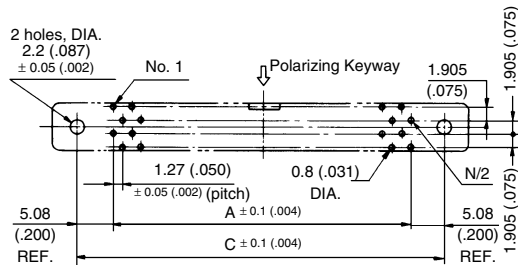
Without Expansion Posts (N)



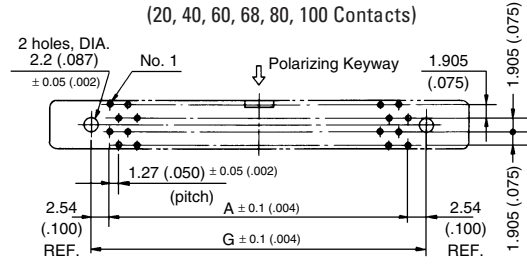
Note 1: For 80 and 100 position connectors, two polarizing keyways are provided. For other contact arrangements, one polarizing keyway is provided at the center.

PCB Hole Pattern

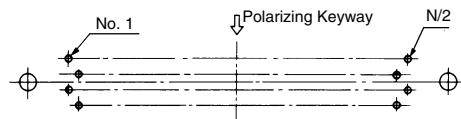
With Expansion Posts (20, 40, 60, 68, 80, 100 Contacts)



Without Expansion Posts (With mounting screw holes) Use #1-40 (M2) self tapping screw to fix PCB. (20, 40, 60, 68, 80, 100 Contacts)



(26, 30, 34, 50 Contacts)



No. of Contacts	Part Number		A	C ref.	D	E ± 0.2 (± .008)	F ± 0.4 (± .016)	G
	With Expansion Post	Without Expansion Post						
20	TX5- 20P-D2ST-MH1	TX5- 20P-D2ST-MN1	11.43 (.450)	20.03 (.789)	21.59 (.850)	23.23 (.915)	28.6 (1.126)	16.51 (.650)
26	TX5- 26P-D2ST-MH1	TX5- 26P-D2ST-MN1	15.24 (.600)	23.84 (.939)	25.40 (1.000)	27.04 (1.065)	32.4 (1.276)	20.32 (.800)
30	TX5- 30P-D2ST-MH1	TX5- 30P-D2ST-MN1	17.78 (.700)	26.38 (1.039)	27.94 (1.100)	29.58 (1.165)	35.0 (1.378)	22.86 (.900)
34	TX5- 34P-D2ST-MH1	TX5- 34P-D2ST-MN1	20.32 (.800)	28.92 (1.139)	30.48 (1.200)	32.12 (1.265)	37.5 (1.476)	25.40 (1.000)
40	TX5- 40P-D2ST-MH1	TX5- 40P-D2ST-MN1	24.13 (.950)	32.73 (1.289)	34.29 (1.350)	35.93 (1.415)	41.3 (1.626)	29.21 (1.150)
50	TX5- 50P-D2ST-MH1	TX5- 50P-D2ST-MN1	30.48 (1.200)	39.08 (1.539)	40.64 (1.600)	42.28 (1.665)	47.7 (1.878)	35.56 (1.400)
60	TX5- 60P-D2ST-MH1	TX5- 60P-D2ST-MN1	36.83 (1.450)	45.43 (1.789)	46.99 (1.850)	48.63 (1.915)	54.0 (2.126)	41.91 (1.650)
68	TX5- 68P-D2ST-MH1	TX5- 68P-D2ST-MN1	41.91 (1.650)	50.51 (1.989)	52.07 (2.050)	53.71 (2.115)	59.1 (2.327)	46.99 (1.850)
80	TX5- 80P-D2ST-MH1	TX5- 80P-D2ST-MN1	49.53 (1.950)	58.13 (2.289)	59.69 (2.350)	61.33 (2.415)	66.7 (2.626)	54.61 (2.150)
100	TX5- 100P-D2ST-MH1	TX5- 100P-D2ST-MN1	62.23 (2.450)	70.83 (2.789)	72.39 (2.850)	74.03 (2.915)	79.4 (3.126)	67.31 (2.650)

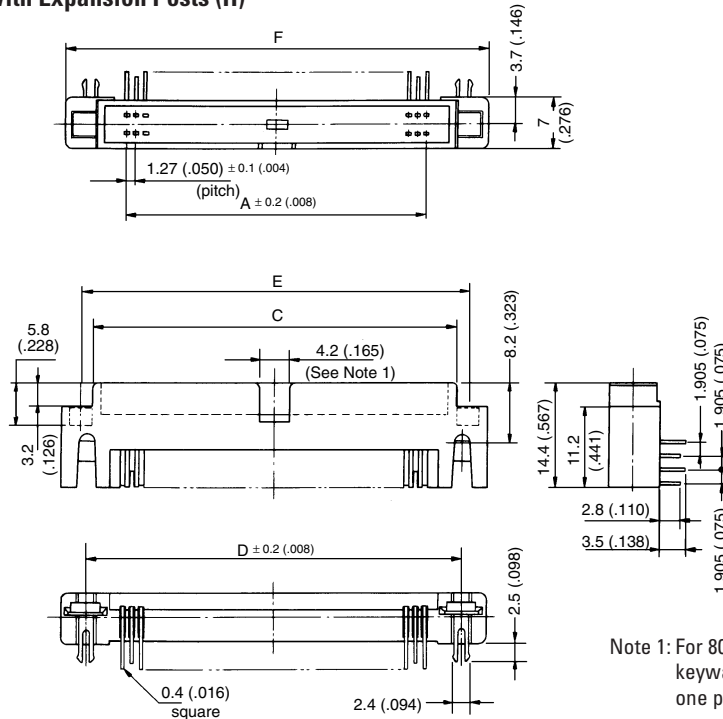
Dimensions in mm (inches).

TX4/TX5 SERIES CONNECTORS

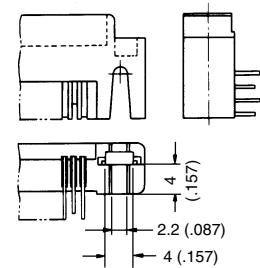
1.27mm (.050") Contact Spacing, PCB-to-PCB Connectors

PIN HEADER (With Mounting Ears) TX5-LT-M—Angle Through Hole Type

With Expansion Posts (H)

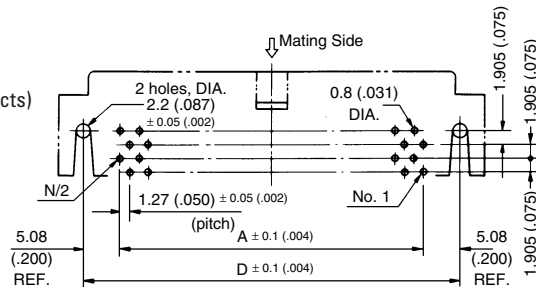


Without Expansion Posts (N)

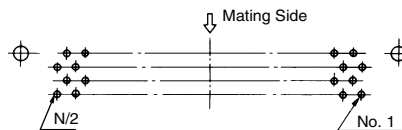


Note 1: For 80 and 100 position connectors, two polarizing keyways are provided. For other contact arrangements, one polarizing keyway is provided at the center.

PCB Hole Pattern (20, 40, 60, 68, 80, 100 Contacts)



(26, 30, 34, 50 Contacts)



No. of Contacts	Part Number		A	C ref.	D	E ± 0.2 (± .008)	F ± 0.4 (± .016)
	With Expansion Post	Without Expansion Post					
20	TX5- 20P-D2LT-MH1	TX5- 20P-D2LT-MN1	11.43 (.450)	20.03 (.789)	21.59 (.850)	23.23 (.915)	28.6 (1.126)
26	TX5- 26P-D2LT-MH1	TX5- 26P-D2LT-MN1	15.24 (.600)	23.84 (.939)	25.40 (1.000)	27.04 (1.065)	32.4 (1.276)
30	TX5- 30P-D2LT-MH1	TX5- 30P-D2LT-MN1	17.78 (.700)	26.38 (1.039)	27.94 (1.100)	29.58 (1.165)	35.0 (1.378)
34	TX5- 34P-D2LT-MH1	TX5- 34P-D2LT-MN1	20.32 (.800)	28.92 (1.139)	30.48 (1.200)	32.12 (1.265)	37.5 (1.476)
40	TX5- 40P-D2LT-MH1	TX5- 40P-D2LT-MN1	24.13 (.950)	32.73 (1.289)	34.29 (1.350)	35.93 (1.415)	41.3 (1.626)
50	TX5- 50P-D2LT-MH1	TX5- 50P-D2LT-MN1	30.48 (1.200)	39.08 (1.539)	40.64 (1.600)	42.28 (1.665)	47.7 (1.878)
60	TX5- 60P-D2LT-MH1	TX5- 60P-D2LT-MN1	36.83 (1.450)	45.43 (1.789)	46.99 (1.850)	48.63 (1.915)	54.0 (2.126)
68	TX5- 68P-D2LT-MH1	TX5- 68P-D2LT-MN1	41.91 (1.650)	50.51 (1.989)	52.07 (2.050)	53.71 (2.115)	59.1 (2.327)
80	TX5- 80P-D2LT-MH1	TX5- 80P-D2LT-MN1	49.53 (1.950)	58.13 (2.289)	59.69 (2.350)	61.33 (2.415)	66.7 (2.626)
100	TX5- 100P-D2LT-MH1	TX5- 100P-D2LT-MN1	62.23 (2.450)	70.83 (2.789)	72.39 (2.850)	74.03 (2.915)	79.4 (3.126)

Dimensions in mm (inches).