

Introduction to the MICTOR SB Interconnection System (0.50 [.020] and 0.80 [.032] Centerline)

Product Facts

- 0.50 [.020] centerline product: 105 dedicated signal lines per inch within one module (60 contacts per module; modules on 20.0 [.788] centerlines)
- 0.80 [.032] centerline product: 66.8 dedicated signal lines per inch within one module (40 contacts per module; modules on 20.0 [.788] centerlines)
- Surface mount family designed for parallel board-to-board, flex-to-board and cable-to-board configurations
- Infrared and forced air convection compatible housing materials
- Designed for 50 ohm systems or 100 ohm systems
- Connector housings polarized for correct mating
- Packaging styles available in trays and pocket tape, with both styles available with or without vacuum dots
- Recognized under the Component Program of Underwriter Laboratories Inc.  File No. E111594



The MICTOR SB connector family is based on the Micro-Strip concept of two rows of signal contacts divided by a center power ground plane.

Various mated heights are available for parallel board-to-board systems. The MICTOR SB connector family is available in 0.50 [.020] and 0.80 [.032] centerlines. They are available in sizes

ranging from 60 to 300 signal positions (in 60 position increments) for the 0.50 [.020] centerline products and from 40 to 200 signal positions (in 40 position increments) for the 0.80 [.032] centerline products. There is a discrete ground bus every 20.0 [.788] of the connector length, which can be assigned to either power or ground in any combination.

The housing material is a liquid crystal polymer, compatible with infrared and forced air convection operations.

The connector system maintains impedance and uses the solid ground bus between the rows of signals to provide low crosstalk and excellent high-speed signal characteristics.

Material and Performance Specifications, MICTOR SB Connectors

Material Specifications

Material

Housing — Liquid crystal polymer, black

Contacts — Phosphor bronze

Ground Bus — Phosphor bronze

Finish (Gold Flash Plating)

Contacts and Ground Bus — Gold flash over 0.00127 [.000050] min. nickel underplate

Finish (10 μ Gold Plating)

Contacts and Ground Bus — 0.00025 [.000010] min. gold over 0.00178 [.000070] min. nickel underplate

Performance Specifications

Ratings

Voltage — 225 vac

Current — Signal; rated 2.0 Amps @ 80°C, derated 1 Amp*
Ground; rated 9.5 Amps @ 80°C, fully derated 6.8 Amps*

Temperature — -65°C to +125°C

*Consult Tyco Electronics for details on current rating.

Electrical Characteristics

Characteristic Impedance — 50 $\pm$ 5 ohms at 1 ns

Termination Resistance — ΔR 15 milliohms max. for signal contacts, ΔR 5 milliohms max. for ground bus contacts; EIA 364-23A

Insulation Resistance — 5,000 megohms min. initial, 1,000 megohms after exposures; EIA 364-21C

Dielectric Withstanding Voltage — 375 vac for 0.50 [.032] centerline connectors and 675 vac for 0.80 [.020] centerline connectors at sea level; EIA 364-208, Condition 1

Mechanical Characteristics

Solderability — Solderable area shall have a 95% min. solder coverage; EIA 364-52

Vibration (Random) — No discontinuities of 1 μ s or longer duration; EIA 364-28D, Condition V

Physical Shock — No discontinuities of 1 μ s or longer duration; EIA 364-27B, Method A

Durability (Tested to) — Mate and unmate samples at a rate of 500 cycles max. per hour. 100 cycles for 10 μ inch gold plated parts; EIA 364-9C

Mating Force — 120 oz max. per 1 module for 0.50 [.020] centerline connectors (Each module equals 60 signal contacts and 1 ground bus). 80 oz max. per 1 module for 0.80 [.032] centerline connectors (Each module equals 40 signal contacts and 1 ground bus)

Unmating Force — 24 oz max. per 1 module for 0.50 [.020] centerline connectors (Each module equals 60 signal contacts and 1 ground bus). 20 oz max. per 1 module for 0.80 [.032] centerline connectors (Each module equals 40 signal contacts and 1 ground bus)

Environmental Characteristics

Thermal Shock — Subject mated samples to 5 cycles between -65°C and +125°C; EIA 364-32C

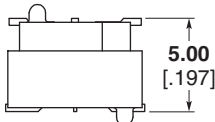
Humidity - Temperature Cycling — Subject mated samples to 10 cycles between -25°C and +65°C at 95% RH; EIA 364-31B, Method III

Temperature Life — Subject mated samples to temperature life at +105°C for 300 hours; EIA 364-17

MICTOR SB Connectors Stack Height Combinations

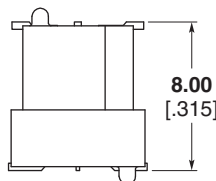
**Gold Flash and 10 μ Gold
Plated Vertical Connectors**
0.80 [.032] and 0.50 [.020]
Centerline Connectors

5.00 [.197] Plug
0.80 [.032] CL (Page 47)
0.50 [.020] CL (Page 57)



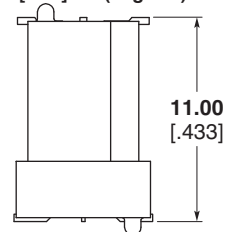
Receptacle
0.80 [.032] CL (Page 46)
0.50 [.020] CL (Page 56)

8.00 [.315] Plug
0.80 [.032] CL (Page 48)
0.50 [.020] CL (Page 58)



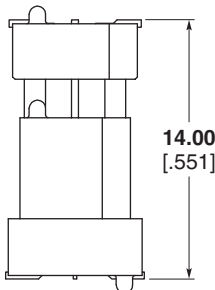
Receptacle
0.80 [.032] CL (Page 46)
0.50 [.020] CL (Page 56)

11.00 [.433] Plug
0.80 [.032] CL (Page 49)
0.50 [.020] CL (Page 59)



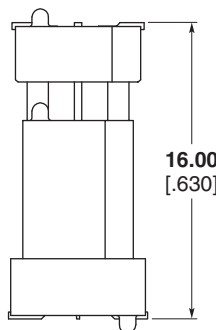
Receptacle
0.80 [.032] CL (Page 46)
0.50 [.020] CL (Page 56)

14.00 [.551] Plug
0.80 [.032] CL (Page 50)
0.50 [.020] CL (Page 60)



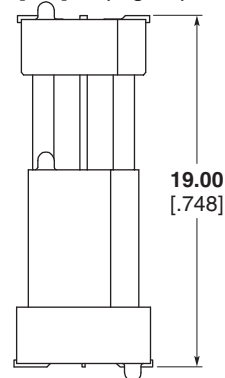
Receptacle
0.80 [.032] CL (Page 46)
0.50 [.020] CL (Page 56)

16.00 [.630] Plug
0.80 [.032] CL (Page 51)
0.50 [.020] CL (Page 61)



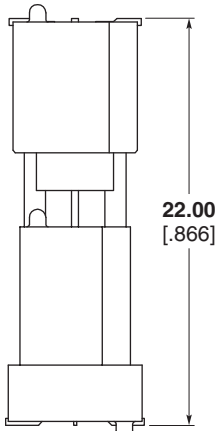
Receptacle
0.80 [.032] CL (Page 46)
0.50 [.020] CL (Page 56)

19.00 [.748] Plug
0.80 [.032] CL (Page 52)
0.50 [.020] CL (Page 62)



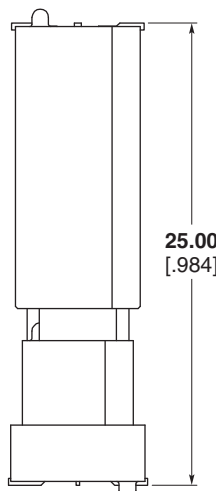
Receptacle
0.80 [.032] CL (Page 46)
0.50 [.020] CL (Page 56)

22.00 [.866] Plug
0.80 [.032] CL (Page 53)
0.50 [.020] CL (Page 63)



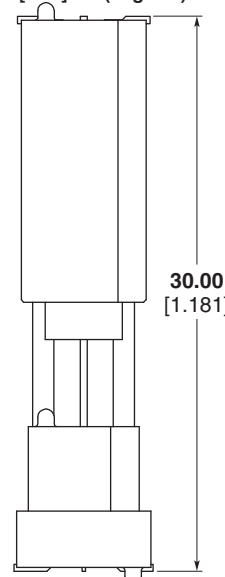
Receptacle
0.80 [.032] CL (Page 46)
0.50 [.020] CL (Page 56)

25.00 [.984] Plug
0.80 [.032] CL (Page 54)
0.50 [.020] CL (Page 64)



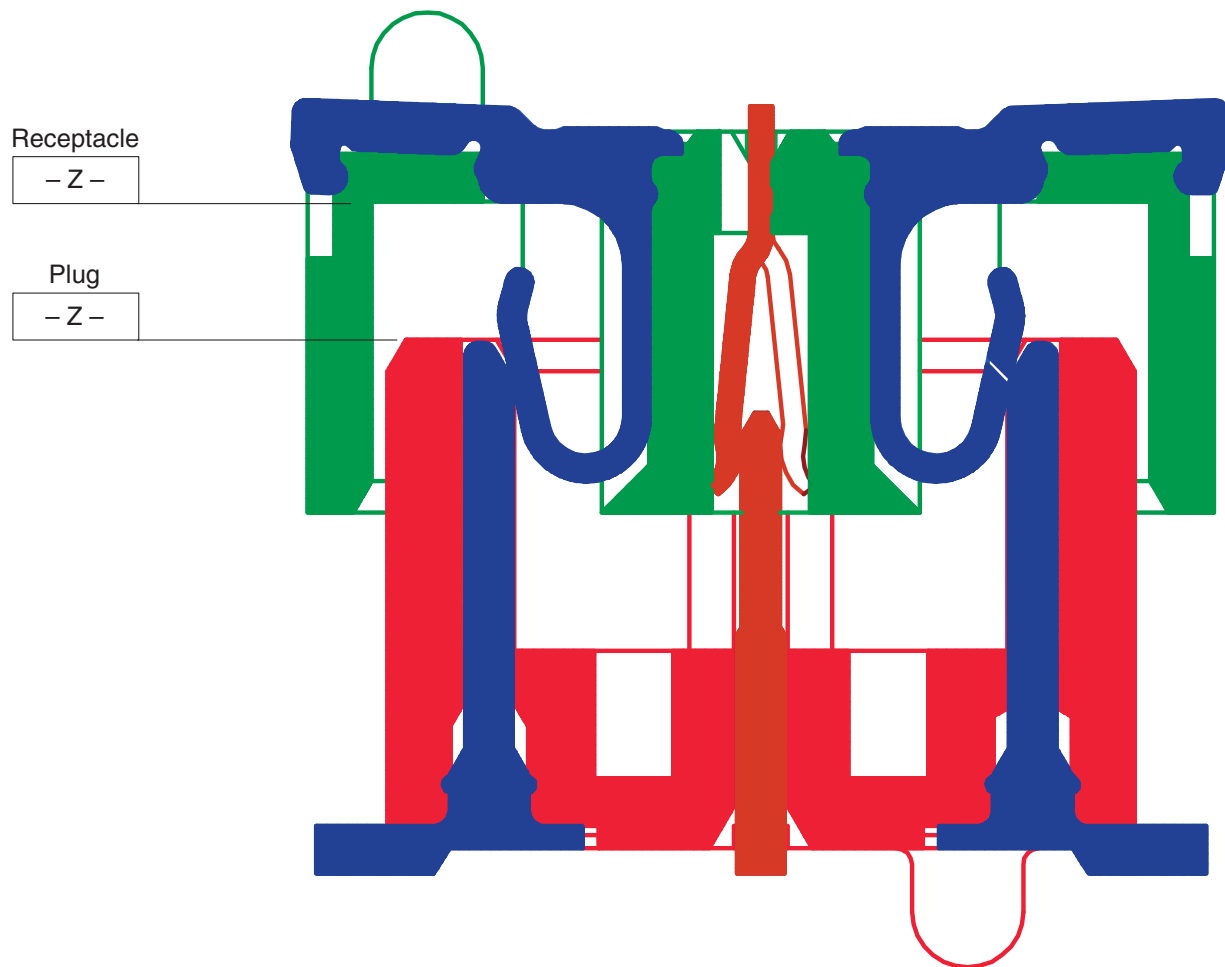
Receptacle
0.80 [.032] CL (Page 46)
0.50 [.020] CL (Page 56)

30.00 [1.181] Plug
0.80 [.032] CL (Page 55)
0.50 [.020] CL (Page 65)



Receptacle
0.80 [.032] CL (Page 46)
0.50 [.020] CL (Page 56)

MICTOR SB Connector Cross Section



MICTOR SB
Interconnection System

Connectors are shown at point where signal contact first touch each other.

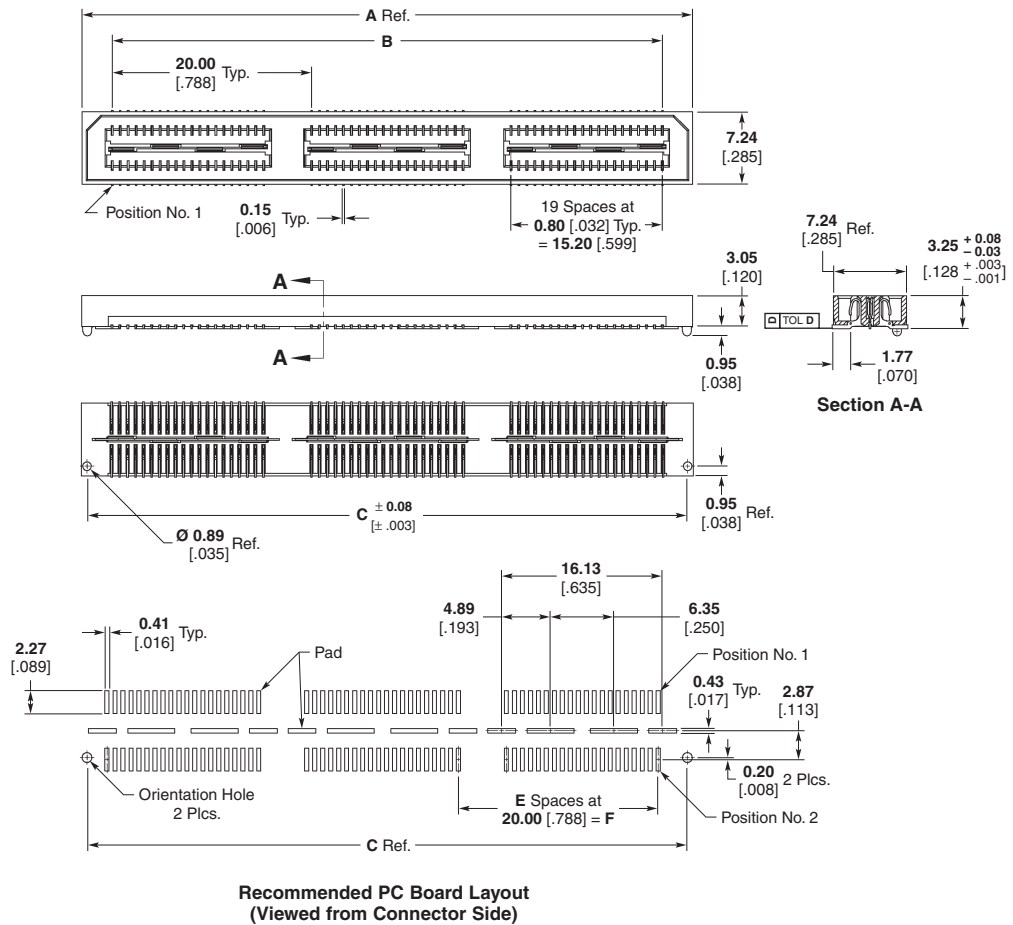
Connectors are designed to be fully mated when the two "Z" datums meet.

Green = Receptacle housing
Red = Plug housing
Blue = Signal contacts
Brown = Ground bus contacts

MICTOR SB Interconnection System

0.80 [.032] Centerline Receptacles

Note: Parts are available with vacuum dots for robotic placement.



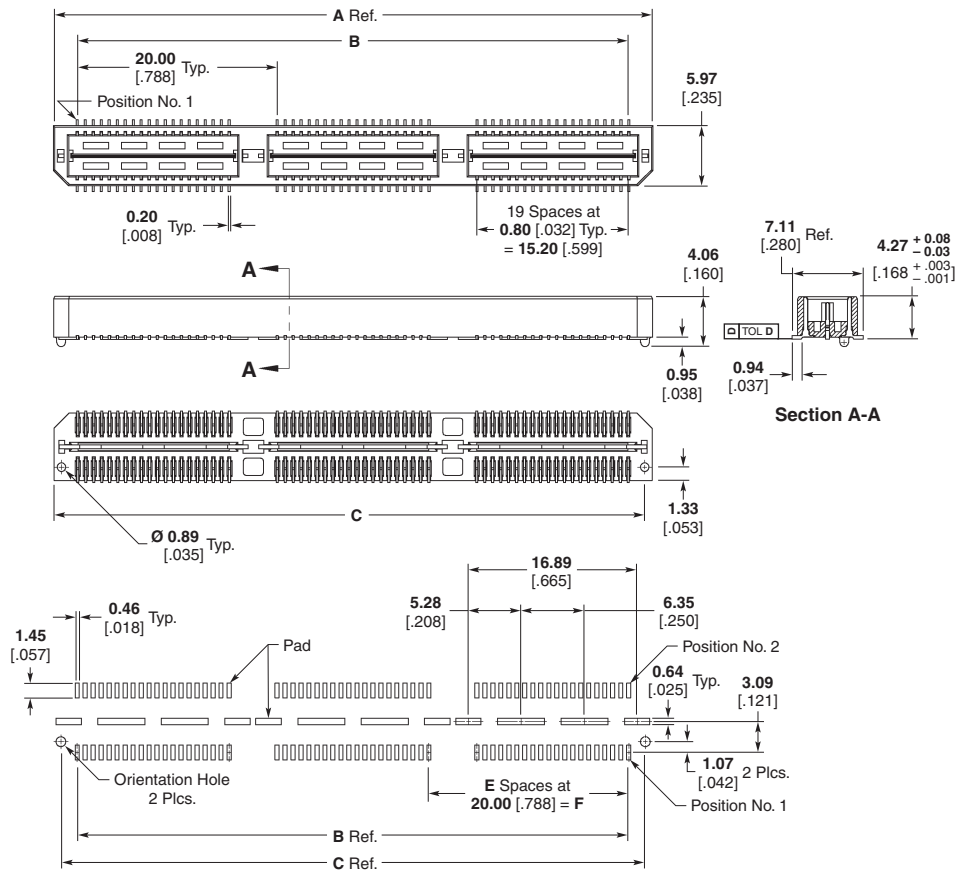
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 µ Gold Plating		30 µ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots		Vacuum Dots	
								Without	With	Without	With	Without	With
Tray	40	21.29 .838	15.20 .599	20.13 .793	0.10 .004	0	0.00 .000	1658043-1	2-1658043-1	1658012-1	2-1658012-1	1658462-1	2-1658462-1
	80	41.28 1.625	35.20 1.386	40.13 1.580	0.10 .004	1	20.00 .788	1658043-2	2-1658043-2	1658012-2	2-1658012-2	1658462-2	2-1658462-2
	120	61.28 2.412	55.21 2.174	60.13 2.368	0.15 .006	2	40.00 1.575	1658043-3	2-1658043-3	1658012-3	2-1658012-3	1658462-3	2-1658462-3
	160	81.28 3.200	75.21 2.961	80.14 3.155	0.15 .006	3	60.01 2.362	1658043-4	2-1658043-4	1658012-4	2-1658012-4	1658462-4	2-1658462-4
	200	101.30 3.988	95.21 3.749	100.14 3.943	0.15 .006	4	80.01 3.150	1658043-5	2-1658043-5	1658012-5	2-1658012-5	1658462-5	2-1658462-5
Tape & Reel	40	21.29 .838	15.20 .599	20.13 .793	0.10 .004	0	0.00 .000	4-1658043-1	6-1658043-1	4-1658012-1	6-1658012-1	4-1658462-1	6-1658462-1
	80	41.28 1.625	35.20 1.386	40.13 1.580	0.10 .004	1	20.00 .788	4-1658043-2	6-1658043-2	4-1658012-2	6-1658012-2	4-1658462-2	6-1658462-2
	120	61.28 2.412	55.21 2.174	60.13 2.368	0.15 .006	2	40.00 1.575	4-1658043-3	6-1658043-3	4-1658012-3	6-1658012-3	4-1658462-3	6-1658462-3

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.80 [.032] Centerline
5.00 [.197] Stack Height
Plugs

Note: Parts are available with vacuum dots for robotic placement.



Recommended PC Board Layout
(Viewed from Connector Side)

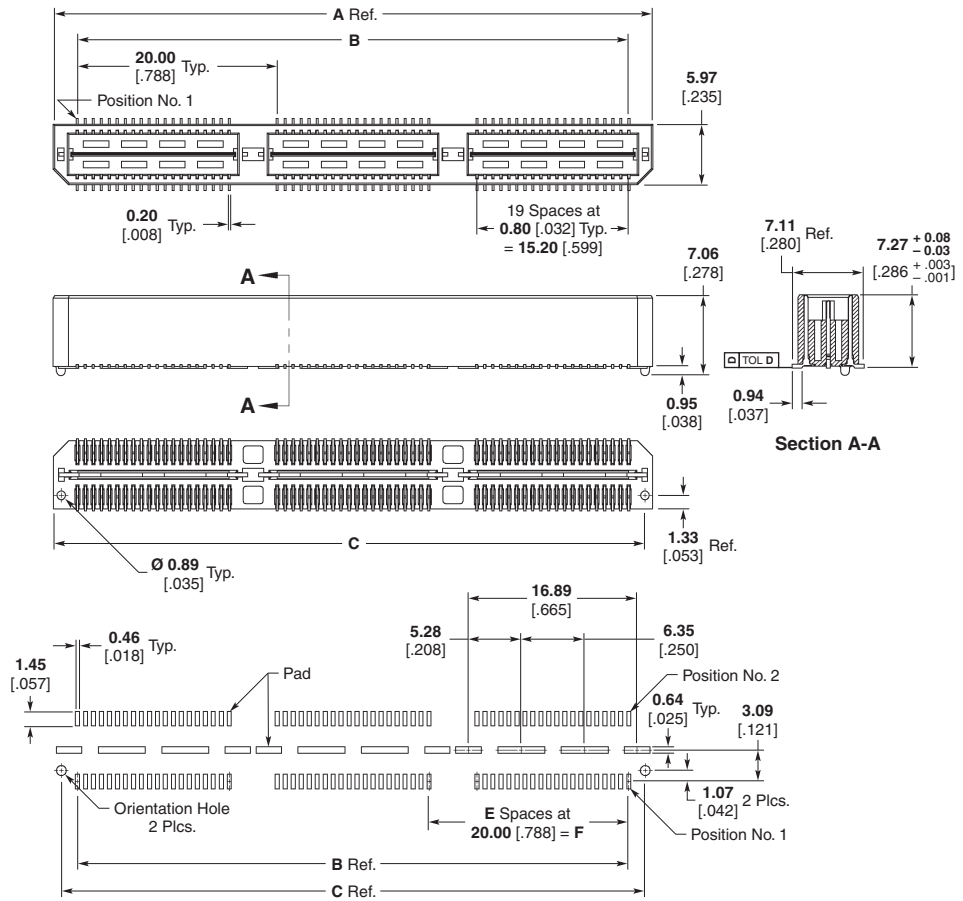
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 µ Gold Plating		30 µ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots		Vacuum Dots	
								Without	With	Without	With	Without	With
Tray	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	1658044-1	2-1658044-1	1658013-1	2-1658013-1	1658463-1	2-1658463-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	1658044-2	2-1658044-2	1658013-2	2-1658013-2	1658463-2	2-1658463-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	1658044-3	2-1658044-3	1658013-3	2-1658013-3	1658463-3	2-1658463-3
	160	80.01 3.150	75.21 2.961	78.49 3.090	0.15 .006	3	60.01 2.362	1658044-4	2-1658044-4	1658013-4	2-1658013-4	1658463-4	2-1658463-4
	200	100.03 3.938	95.22 3.749	98.50 3.878	0.15 .006	4	80.01 3.150	1658044-5	2-1658044-5	1658013-5	2-1658013-5	1658463-5	2-1658463-5
Tape & Reel	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	4-1658044-1	6-1658044-1	4-1658013-1	6-1658013-1	4-1658463-1	6-1658463-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	4-1658044-2	6-1658044-2	4-1658013-2	6-1658013-2	4-1658463-2	6-1658463-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	4-1658044-3	6-1658044-3	4-1658013-3	6-1658013-3	4-1658463-3	6-1658463-3

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.80 [.032] Centerline
8.00 [.315] Stack Height
Plugs

Note: Parts are available with vacuum dots for robotic placement.



Recommended PC Board Layout
(Viewed from Connector Side)

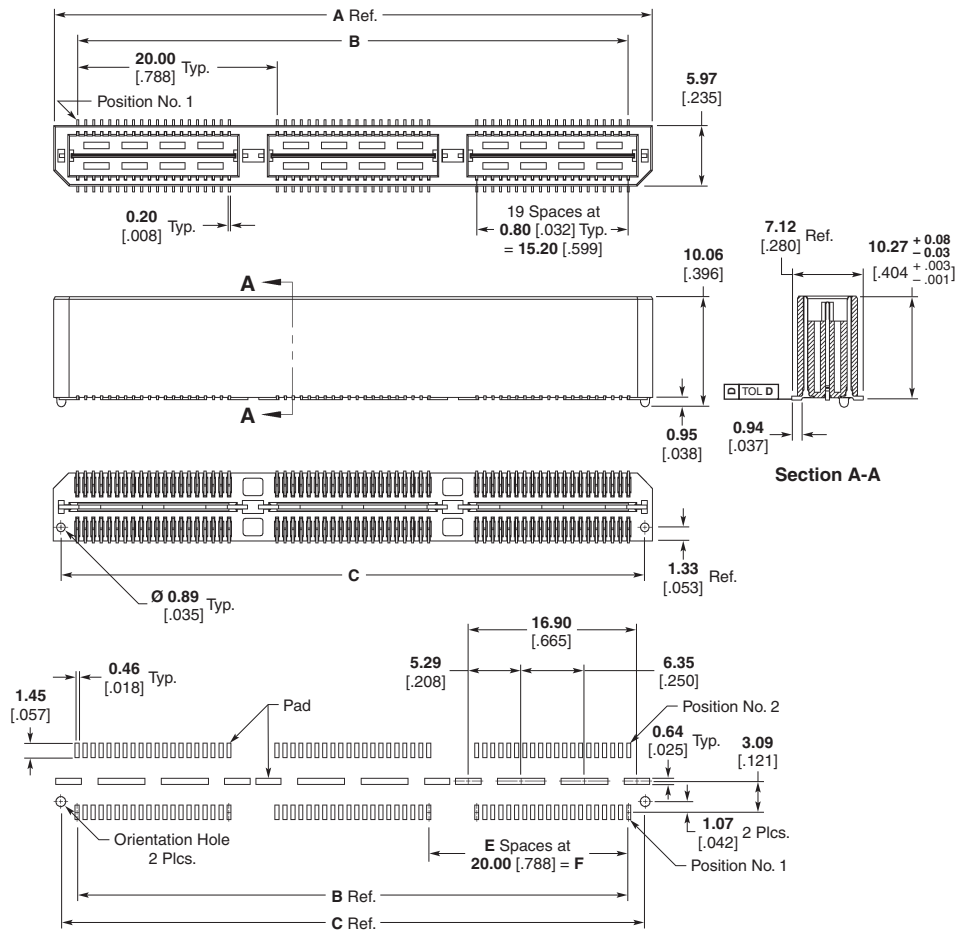
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 µ Gold Plating		30 µ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots		Vacuum Dots	
								Without	With	Without	With	Without	With
Tray	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	1658045-1	2-1658045-1	1658014-1	2-1658014-1	1658464-1	2-1658464-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	1658045-2	2-1658045-2	1658014-2	2-1658014-2	1658464-2	2-1658464-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	1658045-3	2-1658045-3	1658014-3	2-1658014-3	1658464-3	2-1658464-3
	160	80.01 3.015	75.21 2.961	78.49 3.090	0.15 .006	3	60.01 2.362	1658045-4	2-1658045-4	1658014-4	2-1658014-4	1658464-4	2-1658464-4
	200	100.03 3.938	95.22 3.749	98.50 3.878	0.15 .006	4	80.01 3.150	1658045-5	2-1658045-5	1658014-5	2-1658014-5	1658464-5	2-1658464-5
Tape & Reel	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	4-1658045-1	6-1658045-1	4-1658014-1	6-1658014-1	4-1658464-1	6-1658464-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	4-1658045-2	6-1658045-2	4-1658014-2	6-1658014-2	4-1658464-2	6-1658464-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	4-1658045-3	6-1658045-3	4-1658014-3	6-1658014-3	4-1658464-3	6-1658464-3

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.80 [.032] Centerline
11.00 [.433] Stack Height
Plugs

Note: Parts are available with vacuum dots for robotic placement.



**Recommended PC Board Layout
(Viewed from Connector Side)**

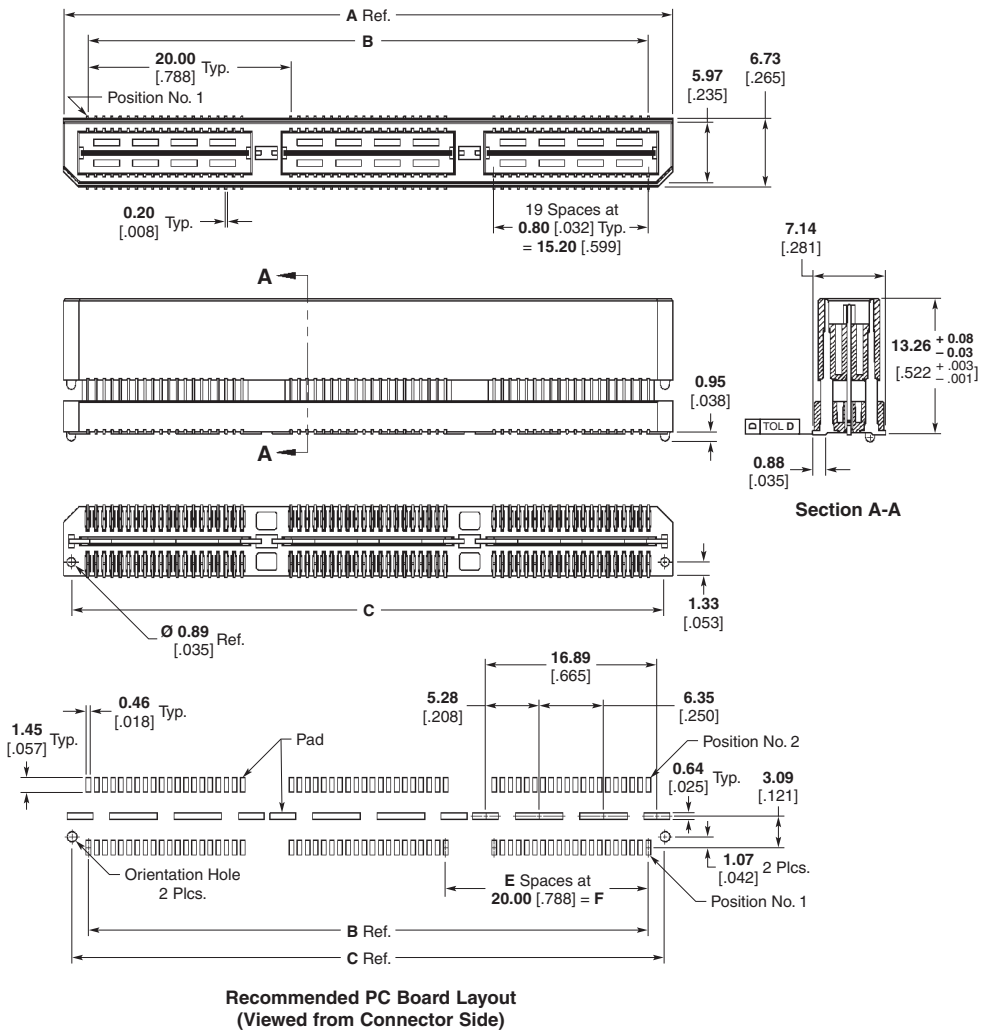
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 µ Gold Plating		30 µ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots		Vacuum Dots	
		Without	With	Without	With	Without	With	Without	With	Without	With	Without	With
Tray	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	1658046-1	2-1658046-1	1658015-1	2-1658015-1	1658465-1	2-1658465-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	1658046-2	2-1658046-2	1658015-2	2-1658015-2	1658465-2	2-1658465-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	1658046-3	2-1658046-3	1658015-3	2-1658015-3	1658465-3	2-1658465-3
	160	80.01 3.015	75.21 2.961	78.49 3.090	0.15 .006	3	60.01 2.362	1658046-4	2-1658046-4	1658015-4	2-1658015-4	1658465-4	2-1658465-4
	200	100.03 3.938	95.22 3.749	98.50 3.878	0.15 .006	4	80.01 3.150	1658046-5	2-1658046-5	1658015-5	2-1658015-5	1658465-5	2-1658465-5
Tape & Reel	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	4-1658046-1	6-1658046-1	4-1658015-1	6-1658015-1	4-1658465-1	6-1658465-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	4-1658046-2	6-1658046-2	4-1658015-2	6-1658015-2	4-1658465-2	6-1658465-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	4-1658046-3	6-1658046-3	4-1658015-3	6-1658015-3	4-1658465-3	6-1658465-3

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.80 [.032] Centerline
14.00 [.551] Stack Height
Plugs

Note: Parts are available with vacuum dots for robotic placement.



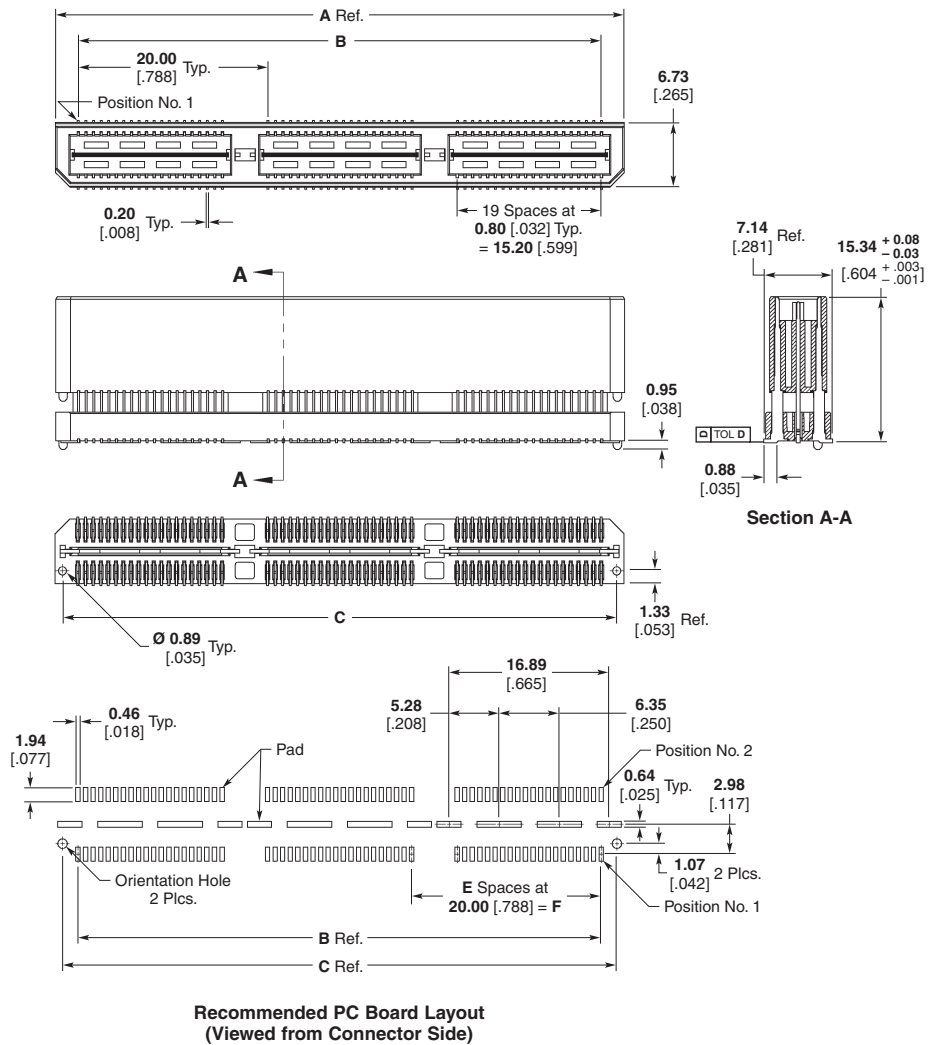
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 µ Gold Plating		30 µ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots		Vacuum Dots	
								Without	With	Without	With	Without	With
Tray	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	1658437-1	2-1658437-1	1658438-1	2-1658438-1	1658439-1	2-1658439-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	1658437-2	2-1658437-2	1658438-2	2-1658438-2	1658439-2	2-1658439-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	1658437-3	2-1658437-3	1658438-3	2-1658438-3	1658439-3	2-1658439-3
	160	80.01 3.015	75.21 2.961	78.49 3.090	0.15 .006	3	60.01 2.362	1658437-4	2-1658437-4	1658438-4	2-1658438-4	1658439-4	2-1658439-4
	200	100.03 3.938	95.22 3.749	98.50 3.878	0.15 .006	4	80.01 3.150	1658437-5	2-1658437-5	1658438-5	2-1658438-5	1658439-5	2-1658439-5
Tape & Reel	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	4-1658437-1	6-1658437-1	4-1658438-1	6-1658438-1	4-1658439-1	6-1658439-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	4-1658437-2	6-1658437-2	4-1658438-2	6-1658438-2	4-1658439-2	6-1658439-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	4-1658437-3	6-1658437-3	4-1658438-3	6-1658438-3	4-1658439-3	6-1658439-3

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.80 [.032] Centerline
16.00 [.630] Stack Height
Plugs

Note: Parts are available with vacuum dots for robotic placement.



MICTOR SB
Interconnection System

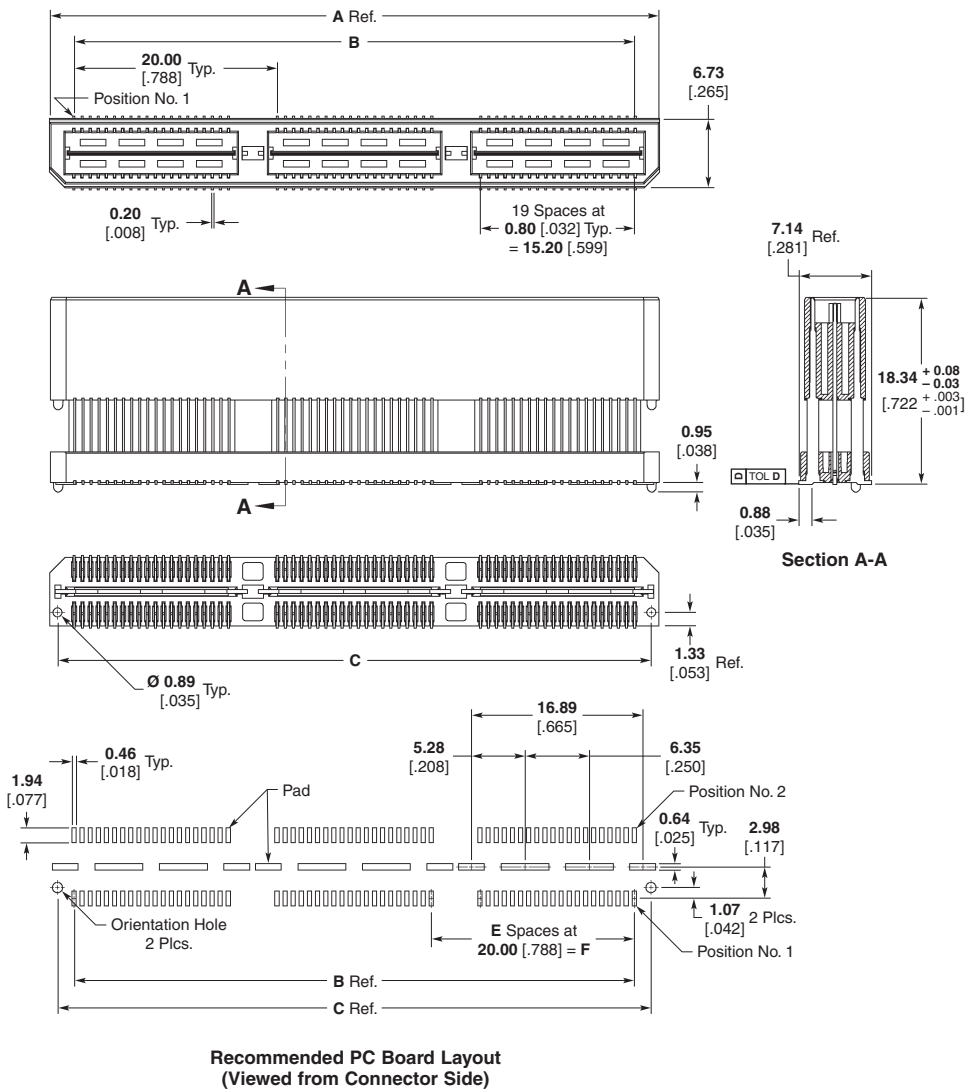
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 μ Gold Plating		30 μ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots		Vacuum Dots	
								Without	With	Without	With	Without	With
Tray	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	1658047-1	2-1658047-1	1658016-1	2-1658016-1	1658466-1	2-1658466-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	1658047-2	2-1658047-2	1658016-2	2-1658016-2	1658466-2	2-1658466-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	1658047-3	2-1658047-3	1658016-3	2-1658016-3	1658466-3	2-1658466-3
	160	80.01 3.015	75.21 2.961	78.49 3.090	0.15 .006	3	60.01 2.362	1658047-4	2-1658047-4	1658016-4	2-1658016-4	1658466-4	2-1658466-4
	200	100.03 3.938	95.22 3.749	98.50 3.878	0.15 .006	4	80.01 3.150	1658047-5	2-1658047-5	1658016-5	2-1658016-5	1658466-5	2-1658466-5
Tape & Reel	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	4-1658047-1	6-1658047-1	4-1658016-1	6-1658016-1	4-1658466-1	6-1658466-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	4-1658047-2	6-1658047-2	4-1658016-2	6-1658016-2	4-1658466-2	6-1658466-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	4-1658047-3	6-1658047-3	4-1658016-3	6-1658016-3	4-1658466-3	6-1658466-3

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

**0.80 [.032] Centerline
19.00 [.748] Stack Height
Plugs**

Note: Parts are available with vacuum dots for robotic placement.



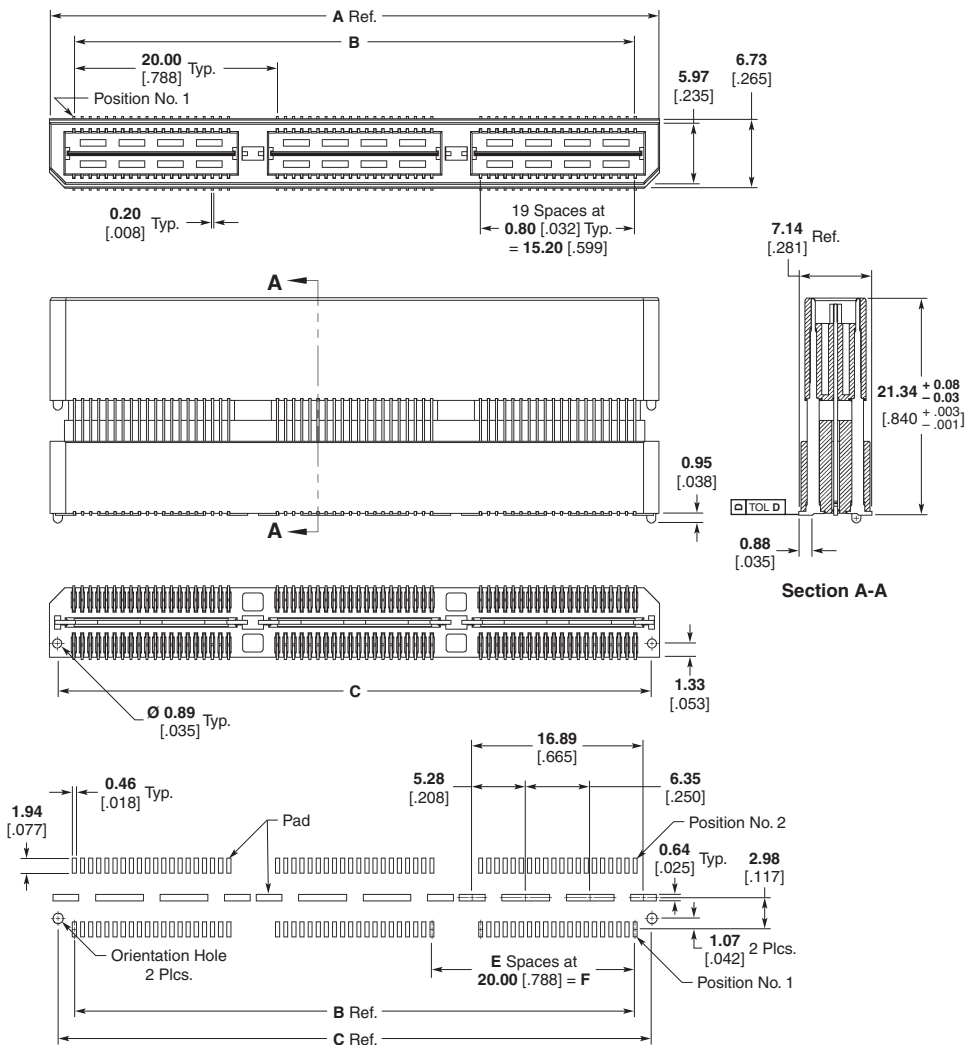
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 μ Gold Plating		30 μ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots		Vacuum Dots	
								Without	With	Without	With	Without	With
Tray	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	1658048-1	2-1658048-1	1658017-1	2-1658017-1	1658467-1	2-1658467-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	1658048-2	2-1658048-2	1658017-2	2-1658017-2	1658467-2	2-1658467-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	1658048-3	2-1658048-3	1658017-3	2-1658017-3	1658467-3	2-1658467-3
	160	80.01 3.015	75.21 2.961	78.49 3.090	0.15 .006	3	60.01 2.362	1658048-4	2-1658048-4	1658017-4	2-1658017-4	1658467-4	2-1658467-4
	200	100.03 3.938	95.22 3.749	98.50 3.878	0.15 .006	4	80.01 3.150	1658048-5	2-1658048-5	1658017-5	2-1658017-5	1658467-5	2-1658467-5

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

**0.80 [.032] Centerline
22.00 [.866] Stack Height
Plugs**

Note: Parts are available with vacuum dots for robotic placement.



**Recommended PC Board Layout
(Viewed from Connector Side)**

**MICTOR SB
Interconnection System**

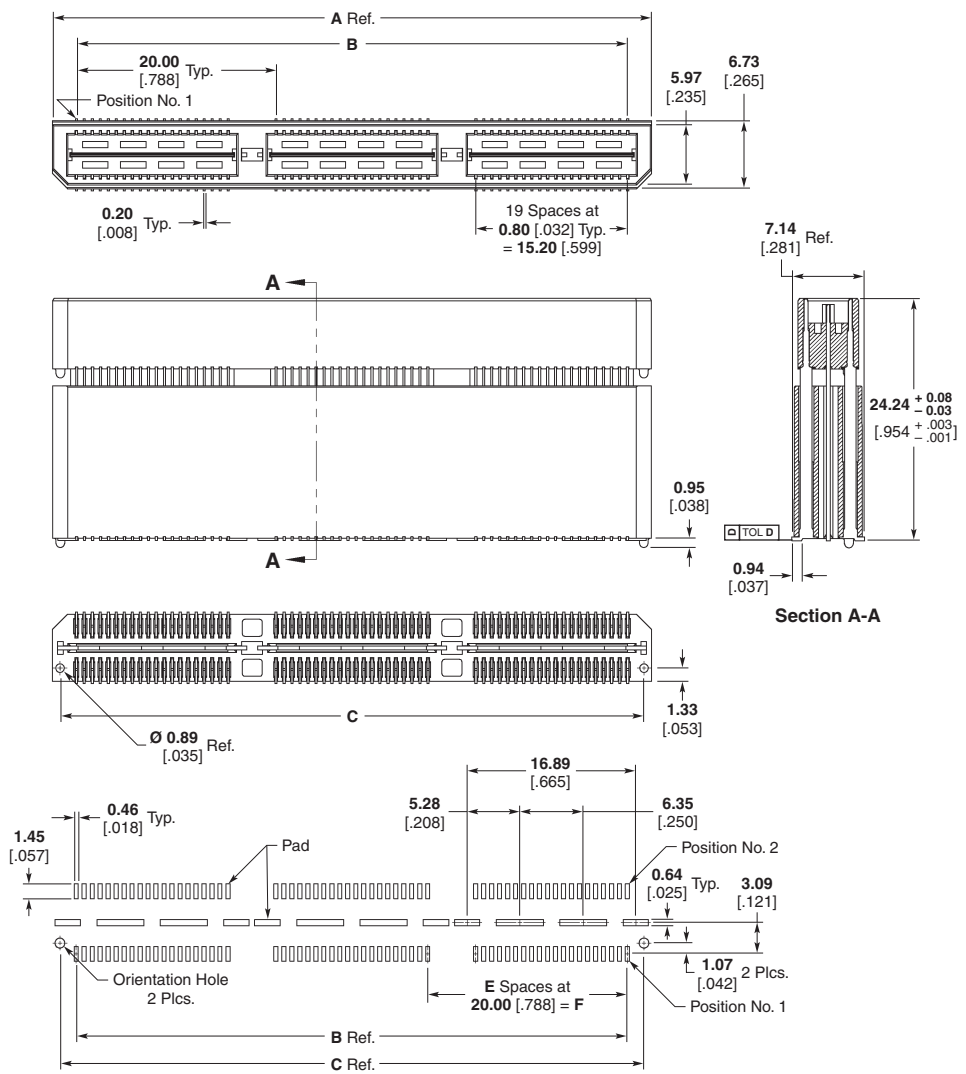
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 μ Gold Plating		30 μ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots		Vacuum Dots	
								Without	With	Without	With	Without	With
Tray	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	1658049-1	2-1658049-1	1658018-1	2-1658018-1	1658468-1	2-1658468-1
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	1658049-2	2-1658049-2	1658018-2	2-1658018-2	1658468-2	2-1658468-2
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	1658049-3	2-1658049-3	1658018-3	2-1658018-3	1658468-3	2-1658468-3
	160	80.01 3.015	75.21 2.961	78.49 3.090	0.15 .006	3	60.01 2.362	1658049-4	2-1658049-4	1658018-4	2-1658018-4	1658468-4	2-1658468-4
	200	100.03 3.938	95.22 3.749	98.50 3.878	0.15 .006	4	80.01 3.150	1658049-5	2-1658049-5	1658018-5	2-1658018-5	1658468-5	2-1658468-5

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.80 [.032] Centerline
25.00 [.984] Stack Height
Plugs

Note: Parts are available with vacuum dots for robotic placement.



Recommended PC Board Layout
(Viewed from Connector Side)

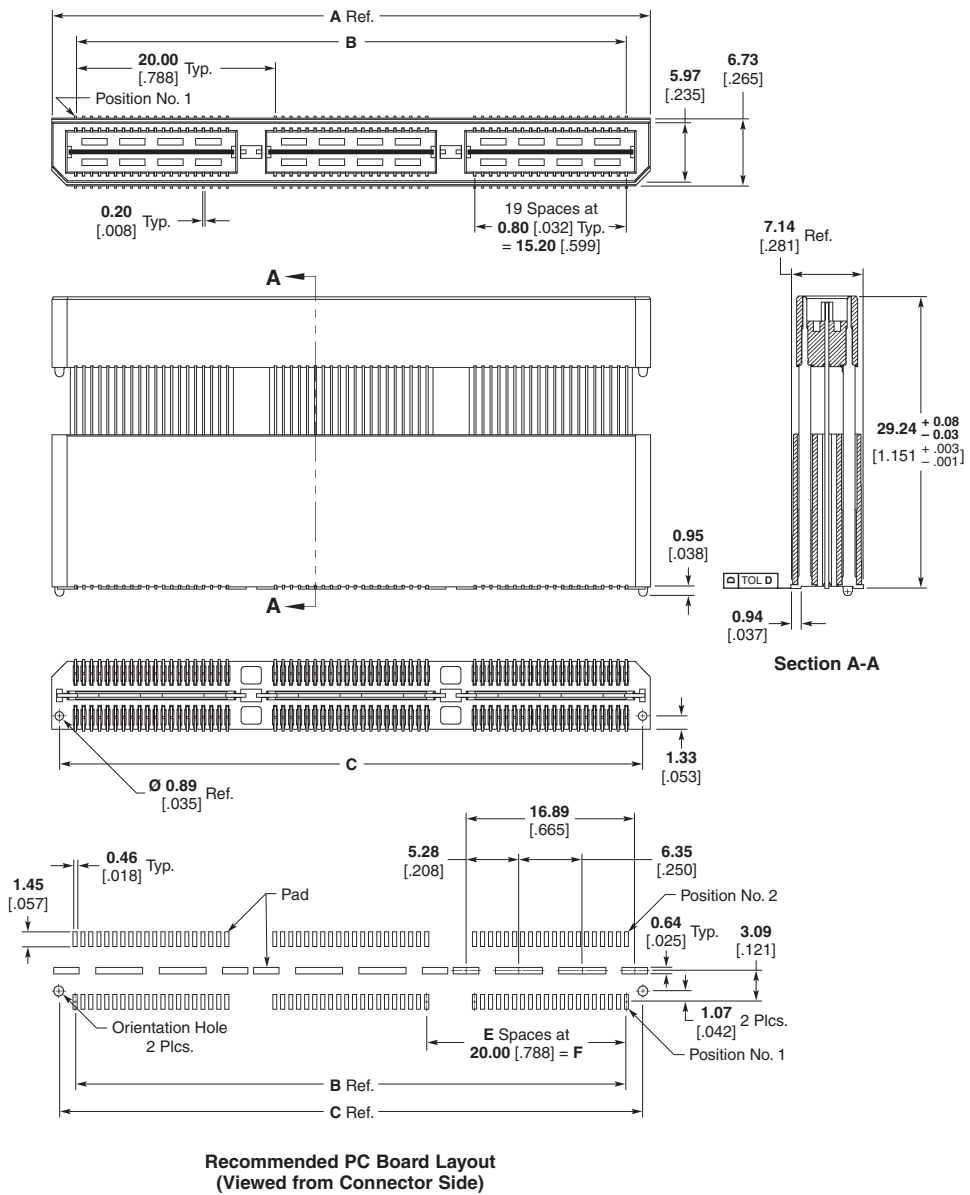
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 μ Gold Plating		30 μ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots		Vacuum Dots	
								Without	With	Without	With	Without	With
Tray	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	1658050-1	—	1658019-1	—	1658469-1	—
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	1658050-2	—	1658019-2	—	1658469-2	—
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	1658050-3	—	1658019-3	—	1658469-3	—
	160	80.01 3.015	75.21 2.961	78.49 3.090	0.15 .006	3	60.01 2.362	1658050-4	—	1658019-4	—	1658469-4	—
	200	100.03 3.938	95.22 3.749	98.50 3.878	0.15 .006	4	80.01 3.150	1658050-5	—	1658019-5	—	1658469-5	—

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.80 [0.032] Centerline
30.00 [1.181] Stack Height
Plugs

Note: Parts are available with vacuum dots for robotic placement.



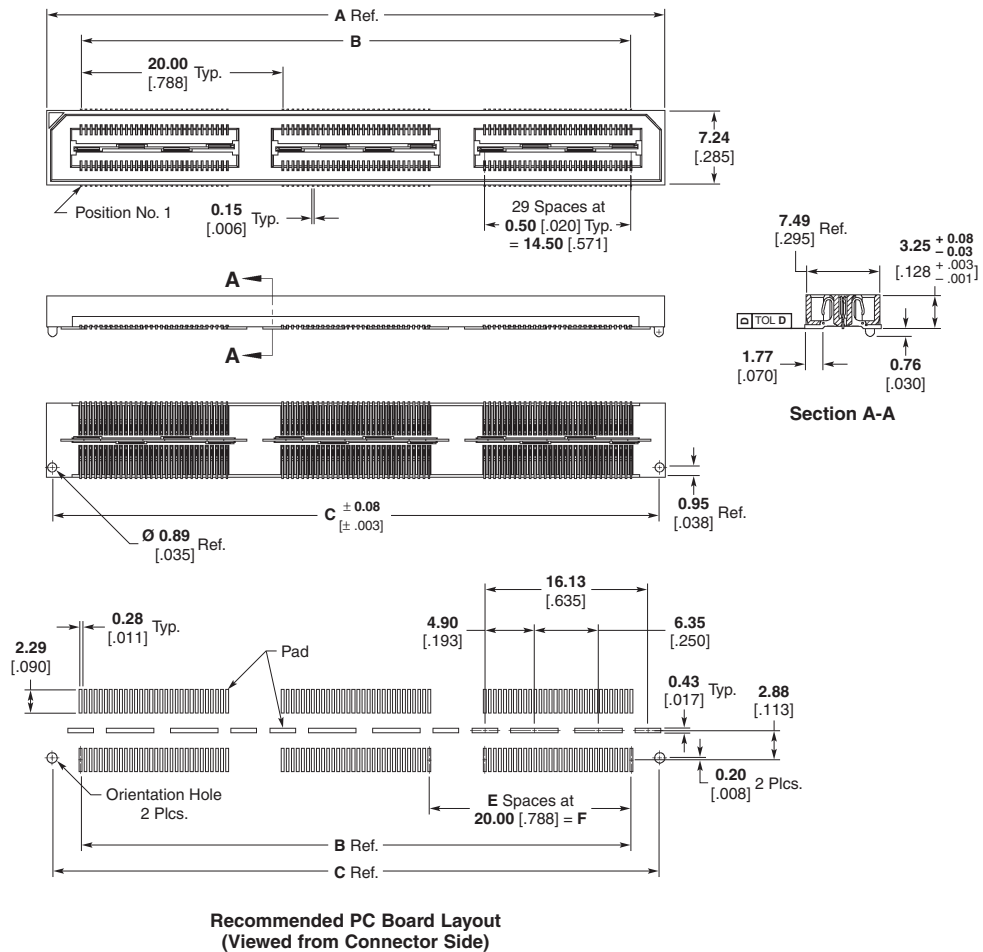
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 μ Gold Plating		30 μ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots		Vacuum Dots	
								Without	With	Without	With	Without	With
Tray	40	20.02 .788	15.21 .599	18.49 .728	0.10 .004	0	0.00 .000	1658051-1	—	1658020-1	—	1658470-1	—
	80	40.01 1.575	35.20 1.386	38.48 1.515	0.10 .004	1	20.00 .788	1658051-2	—	1658020-2	—	1658470-2	—
	120	60.02 2.363	55.22 2.174	58.50 2.303	0.10 .004	2	40.00 1.575	1658051-3	—	1658020-3	—	1658470-3	—
	160	80.01 3.015	75.21 2.961	78.49 3.090	0.15 .006	3	60.01 2.362	1658051-4	—	1658020-4	—	1658470-4	—
	200	100.03 3.938	95.22 3.749	98.50 3.878	0.15 .006	4	80.01 3.150	1658051-5	—	1658020-5	—	1658470-5	—

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.50 [.020] Centerline Receptacles

Note: Parts are available with vacuum dots for robotic placement.



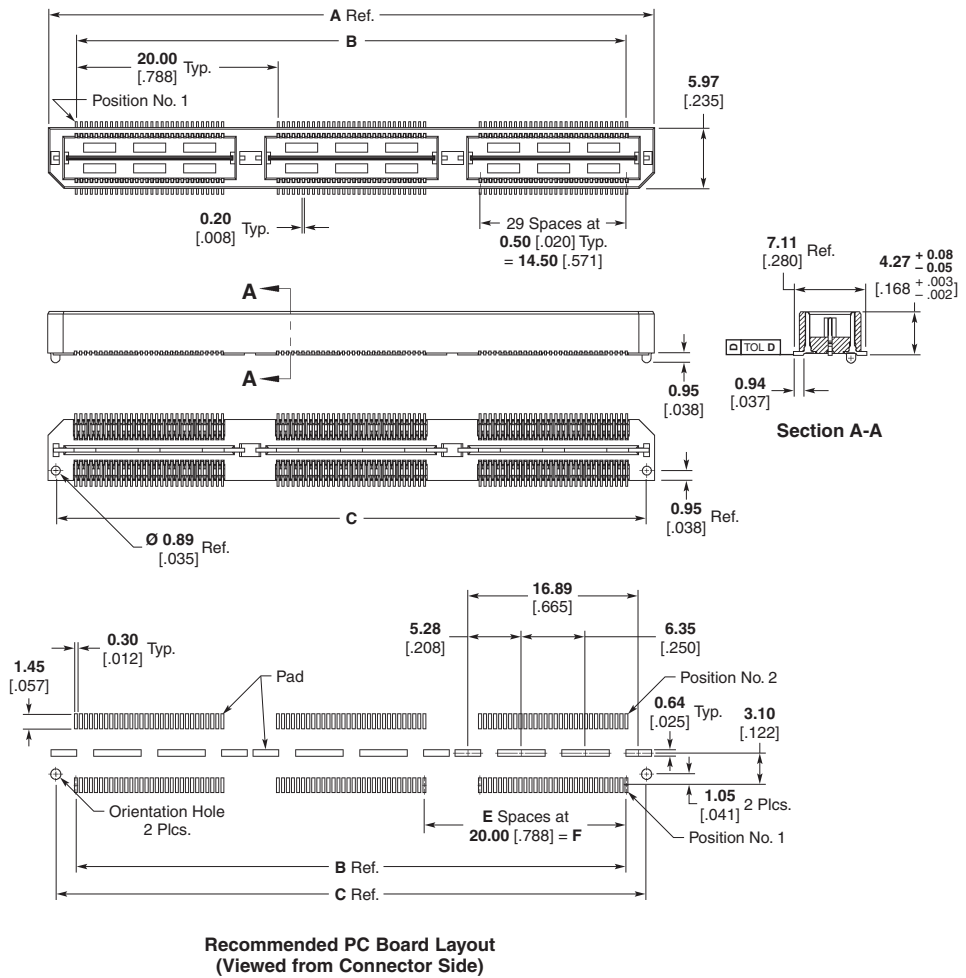
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 µ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots	
								Without	With	Without	With
Tray	60	21.29 .838	14.50 .571	20.13 .793	0.10 .004	0	0.00 .000	1658052-1	2-1658052-1	1658021-1	2-1658021-1
	120	41.28 1.625	34.51 1.359	40.13 1.580	0.10 .004	1	20.00 .788	1658052-2	2-1658052-2	1658021-2	2-1658021-2
	180	61.28 2.412	54.51 2.146	60.13 2.368	0.15 .006	2	40.00 1.575	1658052-3	2-1658052-3	1658021-3	2-1658021-3
	240	81.28 3.200	74.51 2.934	80.14 3.155	0.15 .006	3	60.01 2.362	1658052-4	2-1658052-4	1658021-4	2-1658021-4
	300	101.30 3.988	94.51 3.721	100.14 3.943	0.15 .006	4	80.01 3.150	1658052-5	2-1658052-5	1658021-5	2-1658021-5
Tape & Reel	60	21.29 0.838	14.50 0.571	20.13 0.793	0.10 .004	0	0.00 .000	4-1658052-1	6-1658052-1	4-1658021-1	6-1658021-1
	120	41.28 1.625	34.51 1.359	40.13 1.580	0.10 .004	1	20.00 .788	4-1658052-2	6-1658052-2	4-1658021-2	6-1658021-2
	180	61.28 2.412	54.51 2.146	60.13 2.368	0.15 .006	2	40.00 1.575	4-1658052-3	6-1658052-3	4-1658021-3	6-1658021-3

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.50 [.020] Centerline
5.00 [.197] Stack Height
Plugs

Note: Parts are available with vacuum dots for robotic placement.



MICTOR SB
Interconnection System

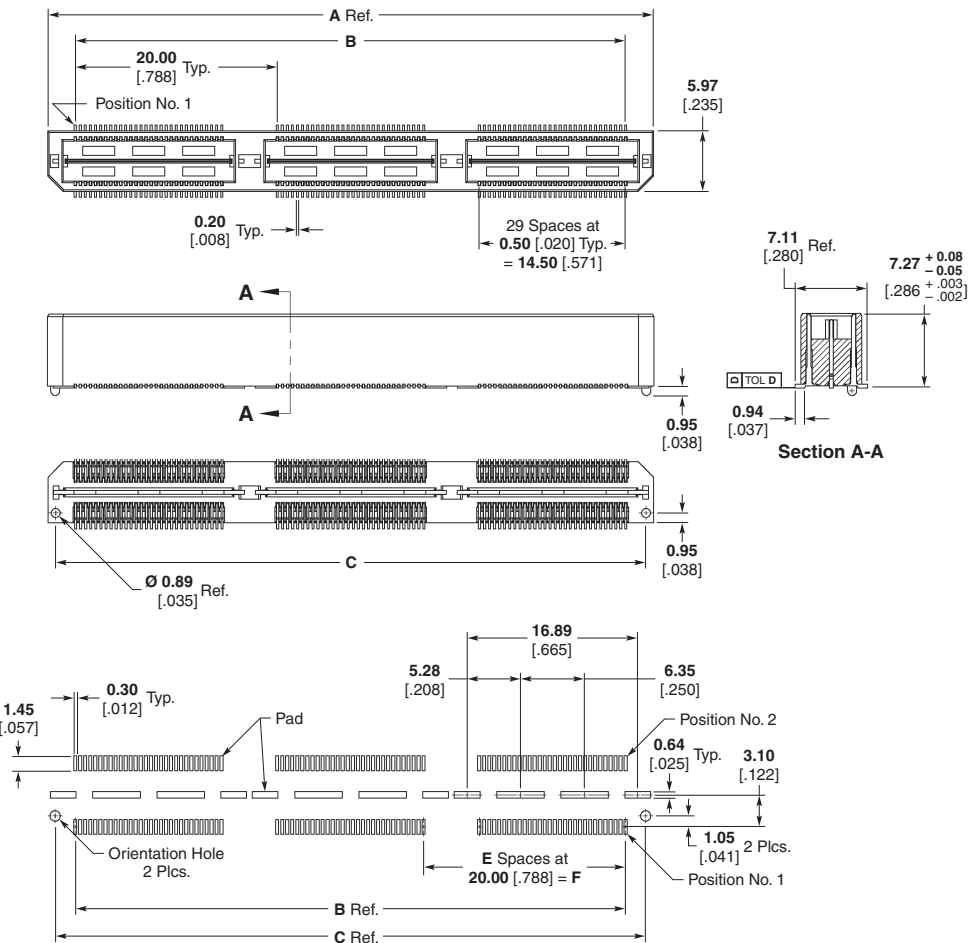
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 µ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots	
								Without	With	Without	With
Tray	60	20.02 .788	14.50 .571	18.49 .728	0.10 .004	0	0.00 .000	1658053-1	2-1658053-1	1658022-1	2-1658022-1
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	1658053-2	2-1658053-2	1658022-2	2-1658022-2
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	1658053-3	2-1658053-3	1658022-3	2-1658022-3
	240	80.01 3.150	74.51 2.934	78.49 3.090	0.15 .006	3	60.01 2.362	1658053-4	2-1658053-4	1658022-4	2-1658022-4
	300	100.03 3.938	94.51 3.721	98.50 3.878	0.15 .006	4	80.01 3.150	1658053-5	2-1658053-5	1658022-5	2-1658022-5
Tape & Reel	60	20.02 .788	14.50 0.571	18.49 0.728	0.10 .004	0	0.00 .000	4-1658053-1	6-1658053-1	4-1658022-1	6-1658022-1
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	4-1658053-2	6-1658053-2	4-1658022-2	6-1658022-2
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	4-1658053-3	6-1658053-3	4-1658022-3	6-1658022-3

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.50 [.020] Centerline
8.00 [.315] Stack Height
Plugs

Note: Parts are available with vacuum dots for robotic placement.



Recommended PC Board Layout
(Viewed from Connector Side)

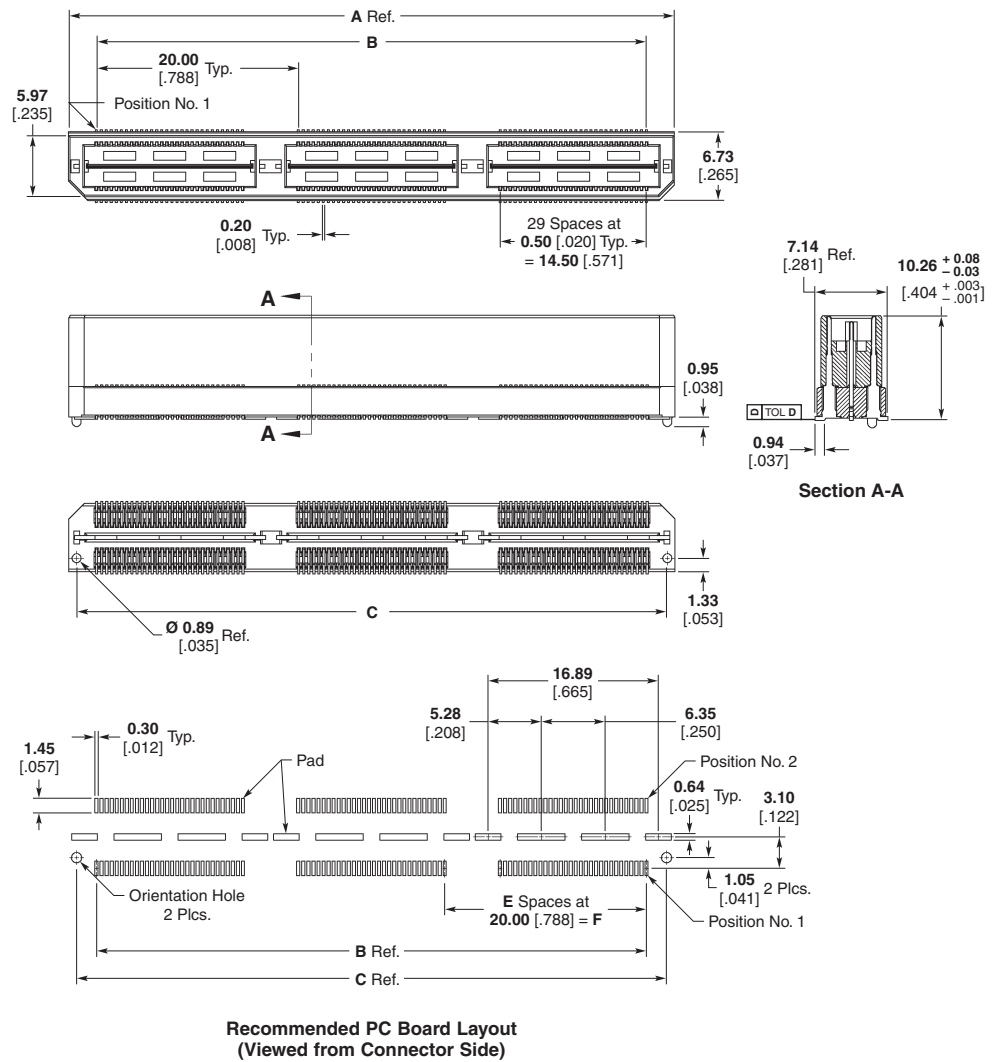
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 μ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots	
								Without	With	Without	With
Tray	60	20.02 .788	14.50 .571	18.49 .728	0.10 .004	0	0.00 .000	1658054-1	2-1658054-1	1658023-1	2-1658023-1
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	1658054-2	2-1658054-2	1658023-2	2-1658023-2
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	1658054-3	2-1658054-3	1658023-3	2-1658023-3
	240	80.01 3.150	74.51 2.934	78.49 3.090	0.15 .006	3	60.01 2.362	1658054-4	2-1658054-4	1658023-4	2-1658023-4
	300	100.03 3.938	94.51 3.721	98.50 3.878	0.15 .006	4	80.01 3.150	1658054-5	2-1658054-5	1658023-5	2-1658023-5
Tape & Reel	60	20.02 .788	14.50 0.571	18.49 0.728	0.10 .004	0	0.00 .000	4-1658054-1	6-1658054-1	4-1658023-1	6-1658023-1
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	4-1658054-2	6-1658054-2	4-1658023-2	6-1658023-2
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	4-1658054-3	6-1658054-3	4-1658023-3	6-1658023-3

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

**0.50 [.020] Centerline
11.00 [.433] Stack Height
Plugs**

Note: Parts are available with vacuum dots for robotic placement.



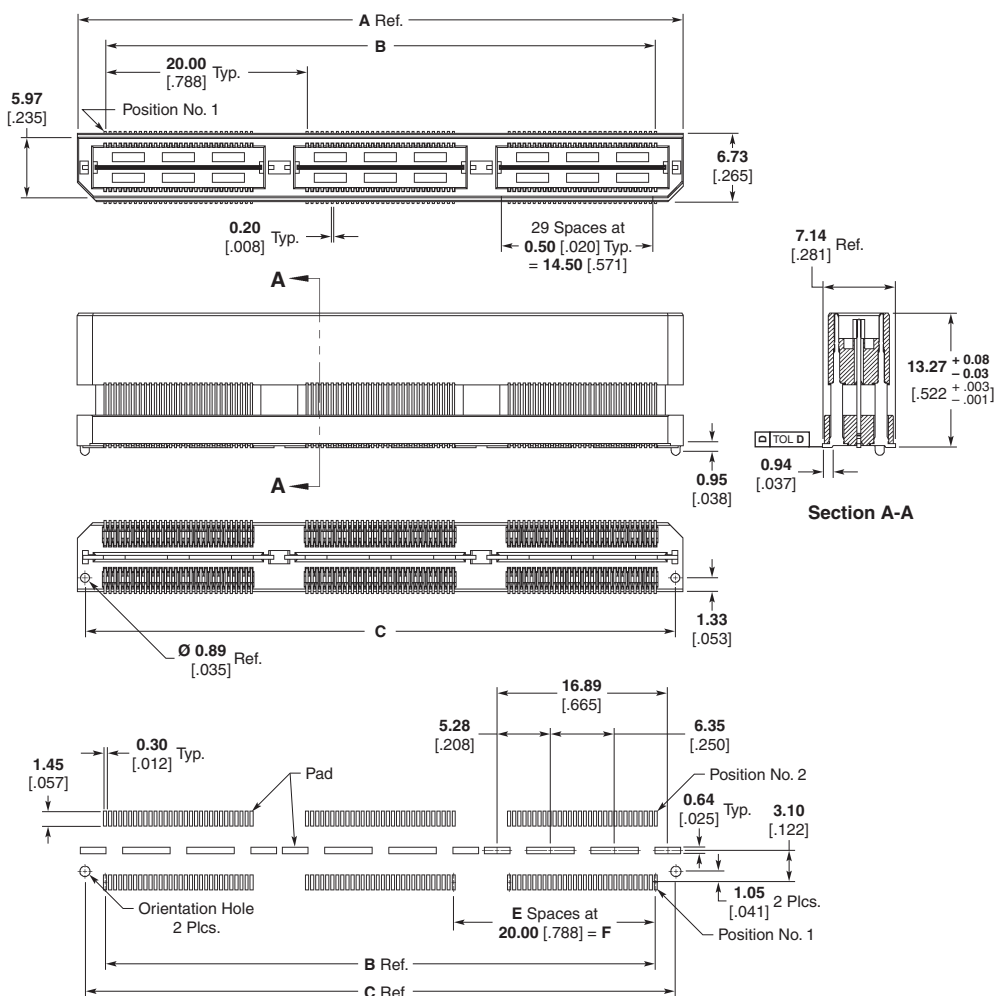
**MICTOR SB
Interconnection System**

Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 µ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots	
								Without	With	Without	With
Tray	60	20.02 .788	14.50 .571	18.49 .728	0.10 .004	0	0.00 .000	1658055-1	2-1658055-1	1658024-1	2-1658024-1
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	1658055-2	2-1658055-2	1658024-2	2-1658024-2
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	1658055-3	2-1658055-3	1658024-3	2-1658024-3
	240	80.01 3.150	74.51 2.934	78.49 3.090	0.15 .006	3	60.01 2.362	1658055-4	2-1658055-4	1658024-4	2-1658024-4
	300	100.03 3.938	94.51 3.721	98.50 3.878	0.15 .006	4	80.01 3.150	1658055-5	2-1658055-5	1658024-5	2-1658024-5
Tape & Reel	60	20.02 .788	14.50 0.571	18.49 0.728	0.10 .004	0	0.00 .000	4-1658055-1	6-1658055-1	4-1658024-1	6-1658024-1
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	4-1658055-2	6-1658055-2	4-1658024-2	6-1658024-2
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	4-1658055-3	6-1658055-3	4-1658024-3	6-1658024-3

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

0.50 [.020] Centerline
14.00 [.551] Stack Height
Plugs



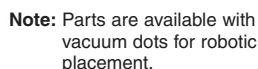
Note: Parts are available with vacuum dots for robotic placement.

Recommended PC Board Layout (Viewed from Connector Side)

Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 μ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots	
								Without	With	Without	With
Tray	60	20.02 .788	14.50 .571	18.49 .728	0.10 .004	0	0.00 .000	1658056-1	2-1658056-1	1658025-1	2-1658025-1
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	1658056-2	2-1658056-2	1658025-2	2-1658025-2
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	1658056-3	2-1658056-3	1658025-3	2-1658025-3
	240	80.01 3.150	74.51 2.934	78.49 3.090	0.15 .006	3	60.01 2.362	1658056-4	2-1658056-4	1658025-4	2-1658025-4
	300	100.03 3.938	94.51 3.721	98.50 3.878	0.15 .006	4	80.01 3.150	1658056-5	2-1658056-5	1658025-5	2-1658025-5
Tape & Reel	60	20.02 .788	14.50 0.571	18.49 0.728	0.10 .004	0	0.00 .000	4-1658056-1	6-1658056-1	4-1658025-1	6-1658025-1
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	4-1658056-2	6-1658056-2	4-1658025-2	6-1658025-2
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	4-1658056-3	6-1658056-3	4-1658025-3	6-1658025-3

Note: All part numbers are RoHS compliant.

0.50 [.020] Centerline
16.00 [.630] Stack Height
Plugs



Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 μ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots	
								Without	With	Without	With
Tray	60	20.02 .788	14.50 .571	18.49 .728	0.10 .004	0	0.00 .000	1658057-1	2-1658057-1	1658026-1	2-1658026-1
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	1658057-2	2-1658057-2	1658026-2	2-1658026-2
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	1658057-3	2-1658057-3	1658026-3	2-1658026-3
	240	80.01 3.150	74.51 2.934	78.49 3.090	0.15 .006	3	60.01 2.362	1658057-4	2-1658057-4	1658026-4	2-1658026-4
	300	100.03 3.938	94.51 3.721	98.50 3.878	0.15 .006	4	80.01 3.150	1658057-5	2-1658057-5	1658026-5	2-1658026-5
Tape & Reel	60	20.02 .788	14.50 0.571	18.49 0.728	0.10 .004	0	0.00 .000	4-1658057-1	6-1658057-1	4-1658026-1	6-1658026-1
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	4-1658057-2	6-1658057-2	4-1658026-2	6-1658026-2
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	4-1658057-3	6-1658057-3	4-1658026-3	6-1658026-3

Catalog 65194
Revised 6-07
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Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

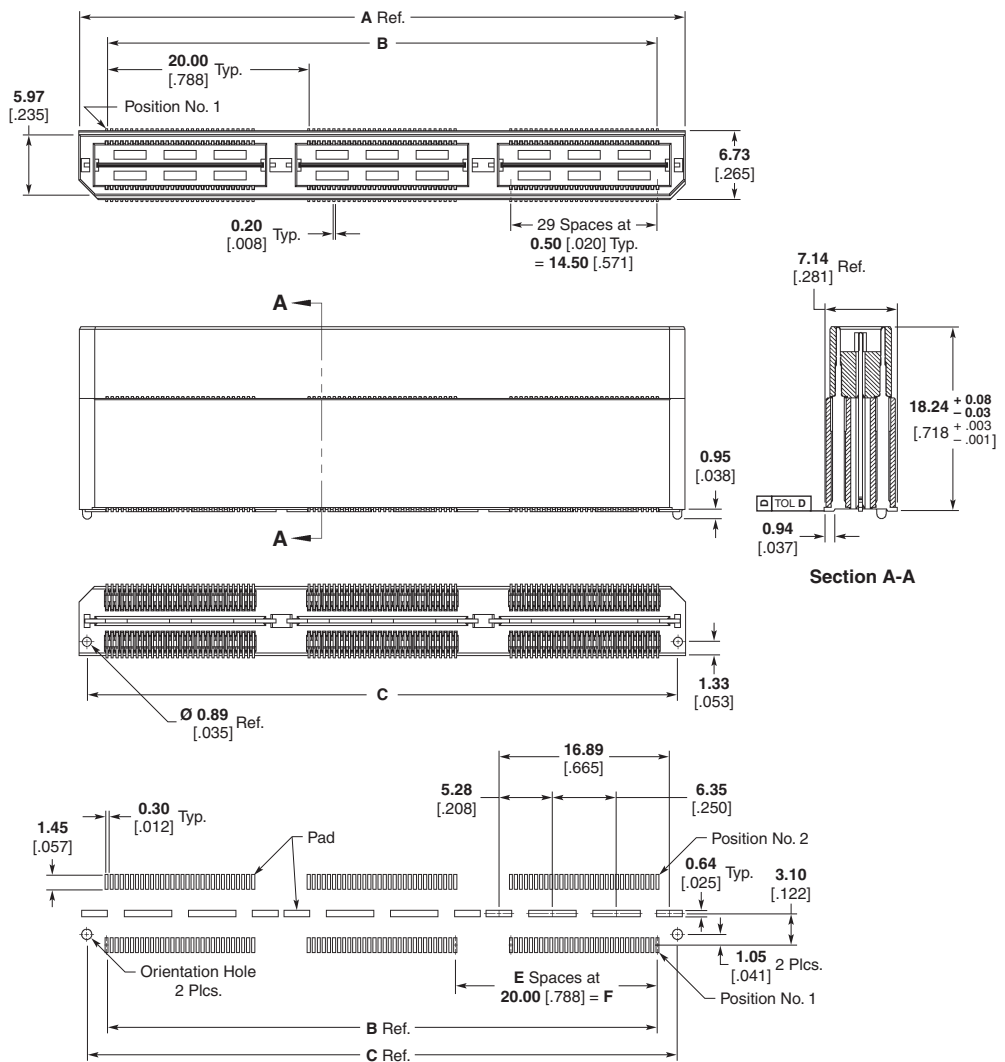
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-1106-0803

South America: 55-11-2103-6000
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-8706-080-208

MICTOR SB Interconnection System (Continued)

**0.50 [.020] Centerline
19.00 [.748] Stack Height
Plugs**



**Recommended PC Board Layout
(Viewed from Connector Side)**

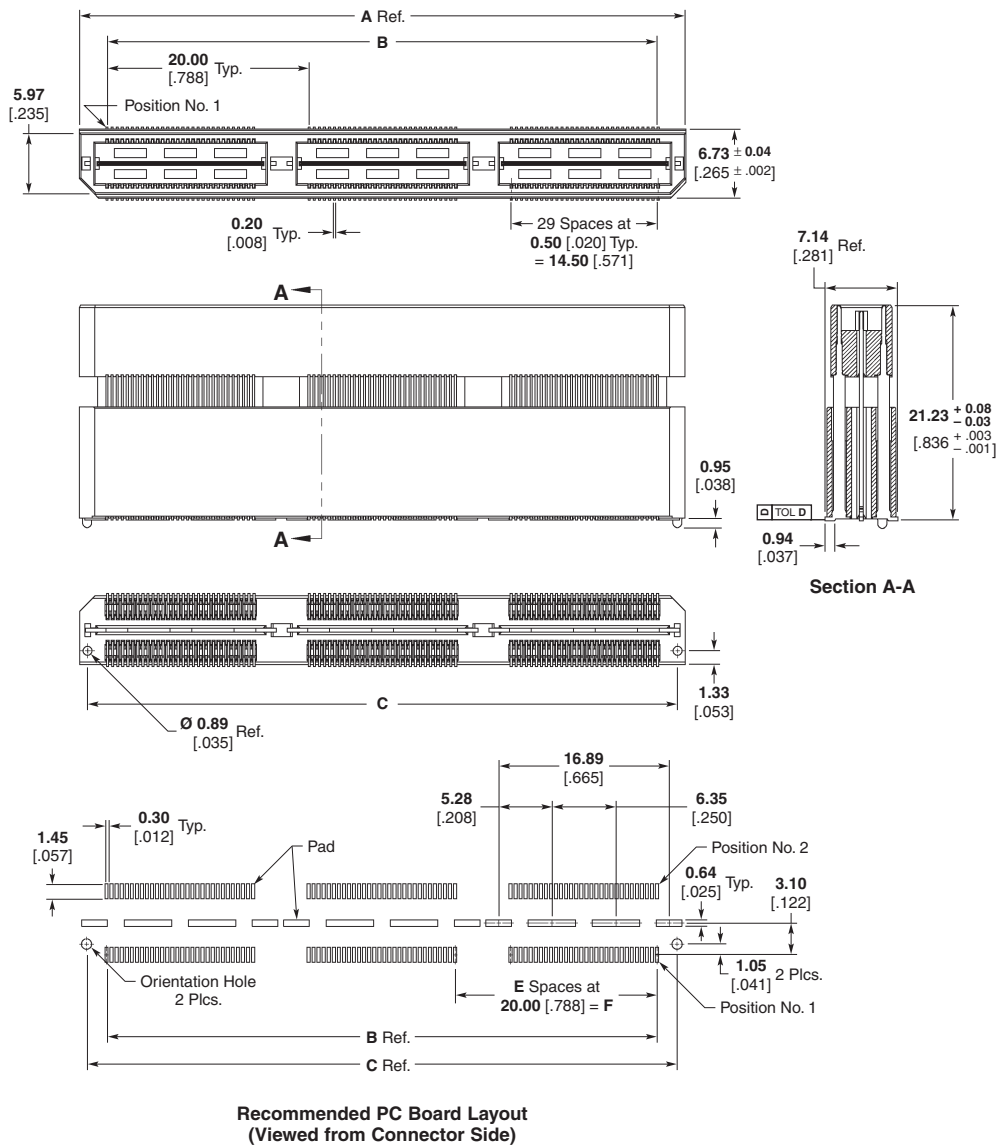
Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 µ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots	
								Without	With	Without	With
Tray	60	20.02 .788	14.50 .571	18.49 .728	0.10 .004	0	0.00 .000	1658058-1	—	1658027-1	—
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	1658058-2	—	1658027-2	—
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	1658058-3	—	1658027-3	—
	240	80.01 3.150	74.51 2.934	78.49 3.090	0.15 .006	3	60.01 2.362	1658058-4	—	1658027-4	—
	300	100.03 3.938	94.51 3.721	98.50 3.878	0.15 .006	4	80.01 3.150	1658058-5	—	1658027-5	—

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

**0.50 [.020] Centerline
22.00 [.866] Stack Height
Plugs**

Note: Parts are available with vacuum dots for robotic placement.

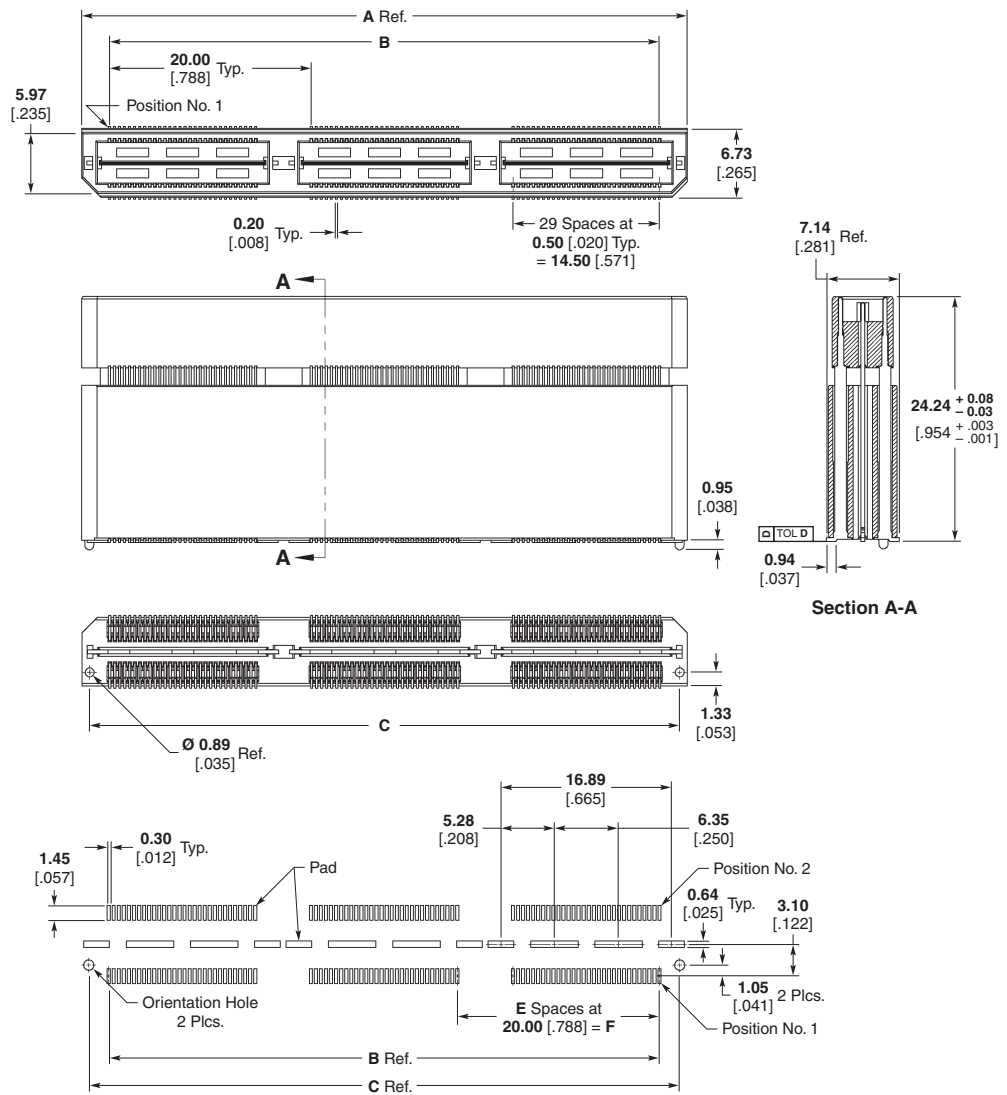


Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 μ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots	
								Without	With	Without	With
Tray	60	20.02 .788	14.50 .571	18.49 .728	0.10 .004	0	0.00 .000	1658059-1	—	1658028-1	—
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	1658059-2	—	1658028-2	—
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	1658059-3	—	1658028-3	—
	240	80.01 3.150	74.51 2.934	78.49 3.090	0.15 .006	3	60.01 2.362	1658059-4	—	1658028-4	—
	300	100.03 3.938	94.51 3.721	98.50 3.878	0.15 .006	4	80.01 3.150	1658059-5	—	1658028-5	—

Note: All part numbers are RoHS compliant.

MICTOR SB Interconnection System (Continued)

**0.50 [.020] Centerline
25.00 [.984] Stack Height
Plugs**



**Recommended PC Board Layout
(Viewed from Connector Side)**

Packaging Type	No. of Positions	Dimensions						Gold Flash Plating		10 µ Gold Plating	
		A	B	C	D	E	F	Vacuum Dots		Vacuum Dots	
								Without	With	Without	With
Tray	60	20.02 .788	14.50 .571	18.49 .728	0.10 .004	0	0.00 .000	1658060-1	—	1658029-1	—
	120	40.01 1.575	34.51 1.359	38.48 1.515	0.10 .004	1	20.00 .788	1658060-2	—	1658029-2	—
	180	60.02 2.363	54.51 2.146	58.50 2.303	0.10 .004	2	40.00 1.575	1658060-3	—	1658029-3	—
	240	80.01 3.150	74.51 2.934	78.49 3.090	0.15 .006	3	60.01 2.362	1658060-4	—	1658029-4	—
	300	100.03 3.938	94.51 3.721	98.50 3.878	0.15 .006	4	80.01 3.150	1658060-5	—	1658029-5	—

Note: All part numbers are RoHS compliant.