

MICTOR SB CONNECTORS

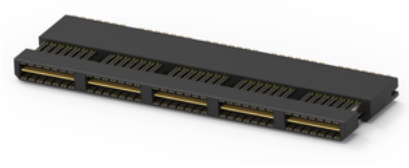
TE Connectivity's (TE) MICTOR Single Beam (SB) connector is a high speed board-to-board connector that can address the needs of high speed interconnection systems. Product advantages include competitive pricing and shorter lead time while providing hybrid functionality of signal and power.

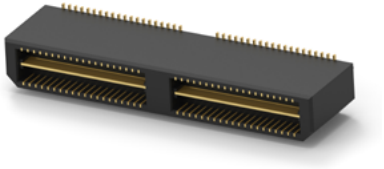
APPLICATIONS

· Server/Storage/Switch
· Industrial PC
· Automotive infotainment
· Industrial high speed camera
· 5G
· PON & GPON (Gigabyte Passive Optical Network)

WHAT ARE MICTOR SB CONNECTORS?

MICTOR SB connectors are microstrip style connectors consisting of two rows of signal contacts divided by a center power ground bar.
They are similar to MICTOR connectors, but utilize single beam signal contacts instead of dual beam contacts. Unlike MICTOR connectors which utilize two mating points for more robust mechanical stability with data rates of 6.5 Gbps, MICTOR SB connectors use one mating point for high speed data.





KEY FEATURES



12 Gbps
12 Gbps high speed date rate

0.8mm pitch
0.8mm pitch surface mount tail

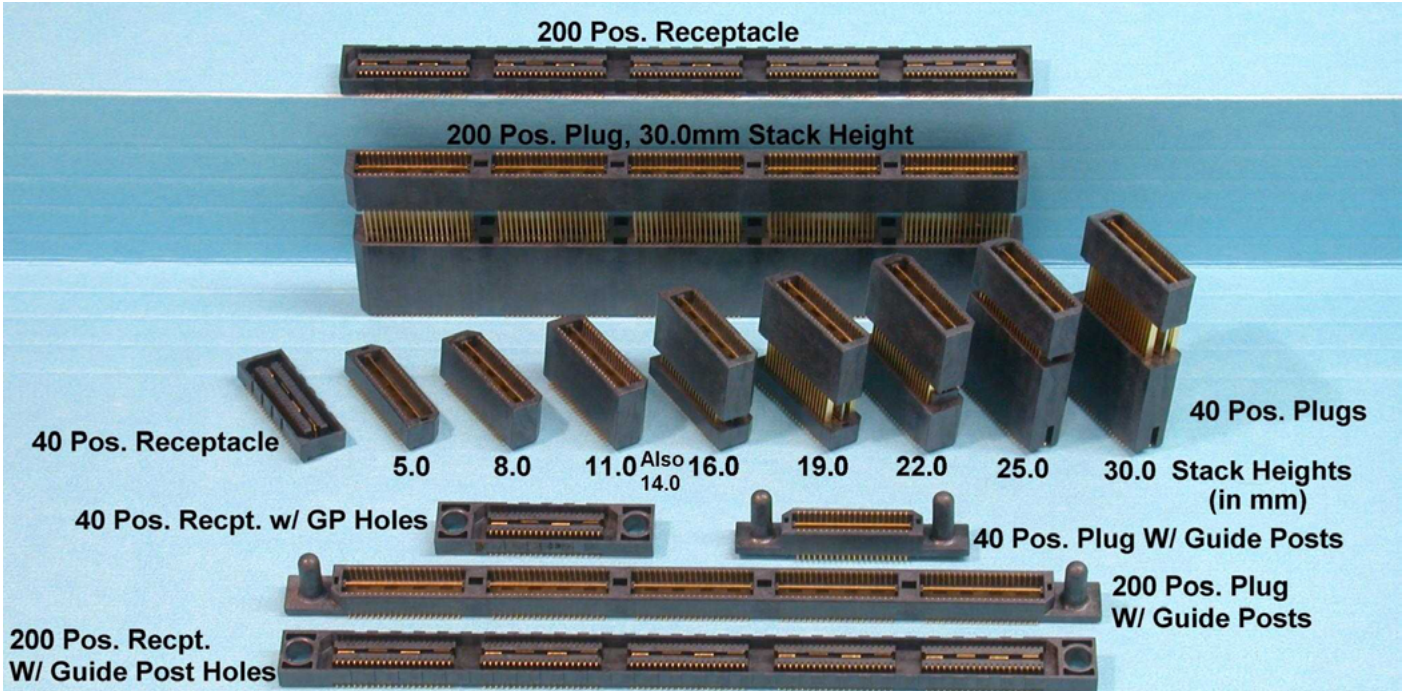
Dedicate ground bar
Single beam and hybrid connector, with ground bar used for low crosstalk or as power pin; each power pin carries 9.5A

2-piece connector
Accommodates a variety of printed circuit board thicknesses, provides controlled impedance

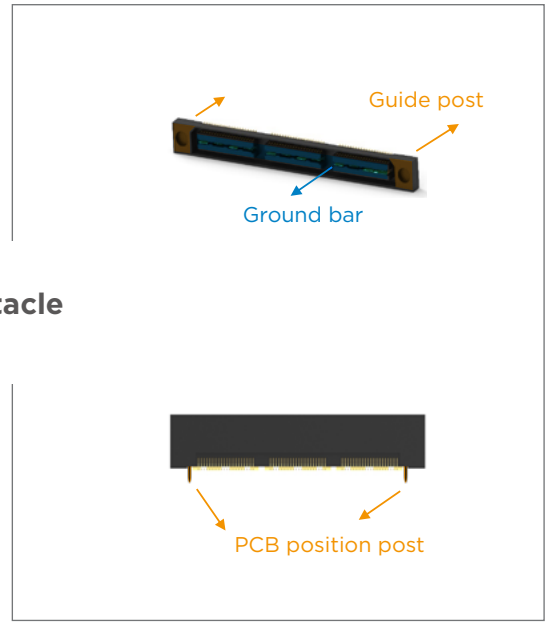
Various stack heights
Various stack heights between 5mm - 30mm; Available stacking heights are: 5, 8, 11, 14, 16, 19, 22, 25, and 30

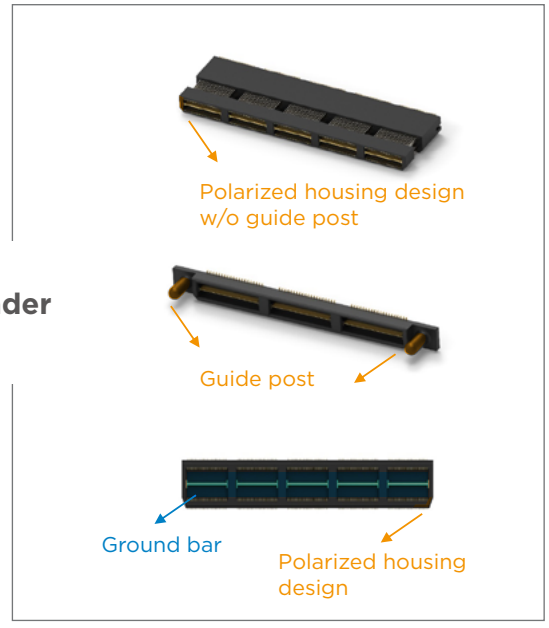
Positions from 28 to 200
· Fully loaded positions: 40, 80, 120, 160, and 200
· Not fully loaded positions: 28, 56, 84, 112, and 140

The MICTOR SB connector family is available in 0.8mm [.032in] centerline with stack heights from 5-30mm, and signal contacts from 28-200.
Depending on the modular design, the connectors are designed to accommodate 28 through 200 contact positions.
Plug connectors are available in various heights to anchor for different stack heights. The stack heights are determined by the parallel board-to-board distance when assembled with a standard vertical receptacle.
Plugs and receptacles have polarized mating faces, and are polarized for mounting on PCBs by using position posts on the bottom of the housings.



MICTOR SB Connectors, 0.80mm centerline





PERFORMANCE

Electrical

- Voltage: 125 volts AC
- Current:
  Signal contacts: 1.25 amperes
  Ground contacts: 9.5 amperes
- Temperature: -65 to 125 °C
- Characteristic Impedance:
  50 ohms/100 ohms

Mechanical

- Mating force: 22.2 N [80 ozf] maximum per module.
- Unmating force: 5.6 N [20 ozf] minimum per module.

Data rate

- 12 Gbps*

* Use below link to contact TE technical experts about specific SI performance
https://www.te.com/global-en/utilities/electrical-models.html?iso=usa

BENEFITS

1 Reliable signal integrity and excellent signal speed

A center power ground bar divides the signal contacts into two rows, allows low crosstalk and excellent high-speed signal characteristics together with controlled impedance.

2 Free pin assignment with a wide range of choices for customers' system design and package

The connector can offer flexibility in system design with single ended, or differential pair pin assignments. Flexibility is enhanced by the free pin assignment design used for all contacts.

3 Robust and smart housing design

The controlled coplanarity and the polarized design is easier for blind mating. The housing material is compatible with infrared and forced air convection operations.

4 Competitive pricing, shorter lead time and faster response

Technical support and production are located in China.

PART NUMBER INFORMATION

	Stacking Height (mm)	Number of Positions	Plating (Au)	Packaging	Polyester Film	Guide Post	TE Part Number
Header	5	40	10u"	Tape & Reel	Y		6-1658013-1
	5	28	10u"	Tray	Y		3-1658013-1
	5	56	10u"	Tray	Y		3-1658013-2
	5	80	10u"	Tray	Y		2-1658013-2
	5	84	10u"	Tray			1-1658013-3
	5	140	10u"	Tray	Y		3-1658013-5
	5	200	10u"	Tray	Y		2-1658013-5
	5	112	10u"	Tray			1-1658013-4
	5	160	10u"	Tray	Y		2-1658013-4
	5	120	10u"	Tray	Y	Y	2-1658063-3
	8	28	10u"	Tape & Reel	Y		7-1658014-1
	8	40	10u"	Tape & Reel	Y		6-1658014-1
	8	120	10u"	Tray			1658014-3
	11	40	10u"	Tape & Reel	Y		6-1658015-1
	11	80	10u"	Tray	Y		2-1658015-2
	11	40	10u"	Tray			1658015-1
	11	160	10u"	Tray			1658015-4
	14	120	G/F	Tray	Y		2-1658438-3
	16	28	10u"	Tape & Reel	Y		7-1658016-1
	16	40	10u"	Tray			1658016-1
	16	120	10u"	Tape & Reel	Y		6-1658016-3
	16	80	10u"	Tape & Reel	Y		6-1658016-2
	16	80	30u"	Tape & Reel	Y		6-1658466-2
	16	160	10u"	Tray			1658016-4
	16	200	10u"	Tray			1658016-5
	19	160	10u"	Tray	Y		2-1658017-4
	22	56	10u"	Tray	Y		3-1658018-2
	22	40	10u"	Tray			1658018-1
	25	28	10u"	Tray	Y		1-1658019-1
	25	40	10u"	Tray			1658019-1
	25	160	10u"	Tray			1658019-4
	30	28	10u"	Tray	Y		1-1658020-1
	30	40	30u"	Tray			1658470-1
	30	200	10u"	Tray			1658020-5
Receptacle	–	28	10u"	Tray			1-1658012-1
		40	10u"	Tape & Reel	Y		6-1658012-1
		40	30u"	Tray			1658462-1
		40	10u"	Tray			1658012-1
		56	10u"	Tray			1-1658012-2
		80	10u"	Tape & Reel	Y		6-1658012-2
		80	G/F	Tape & Reel	Y		6-1658043-2
		84	10u"	Tape & Reel	Y		7-1658012-3
		112	10u"	Tray			1-1658012-4
		120	10u"	Tape & Reel	Y		6-1658012-3
		120	10u"	Tray	Y	Y	2-1658062-3
		140	10u"	Tray	Y		3-1658012-5
		160	10u"	Tray	Y		2-1658012-4
		200	10u"	Tray	Y		2-1658012-5

For more information. LET'S CONNECT

We make it easy to connect with our experts and are ready to provide all the support you need. Just call your local support number or visit www.te.com/support-center to chat with a Product Information Specialist.

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