

One product family covering all board-to-board applications

MBX



- Very high axial float - best in class
- High output power
- Excellent return loss values
- Smallest board-to-board distances in class

MBX 2nd generation



- Very high axial float - best in class
- Excellent return loss values
- Smallest board-to-board distances in class

MFBX



- Medium float
- Low cost
- Very good board-to-board shielding
- Small board-to-board distances

MMBX



- Very high frequencies - best in class
- Very good return loss values
- Smallest board-to-board distances in class

Characteristics	MBX and MBX ^{2nd}	MFBX	MMBX
Frequency	DC to 6 GHz	DC to 6 GHz	DC to 12.4 GHz
Axial float (misalignment)	± 1.2 mm	± 0.8 mm	± 0.3 mm
Radial float (misalignment)	± 0.6 mm (at 13 mm board-to-board distance) ± 1.0 mm (≥ 18 mm board-to-board distance)	± 0.8 mm	± 0.4 mm (at 6.7 mm board-to-board distance)
Min. board-to-board distance	13 mm	13 mm	6.7 mm
Min. panel-to-board distance	< 13 mm depending on connector	< 13 mm depending on connector	4.63 mm
Min. panel-to-panel distance	< 13 mm depending on connector	< 13 mm depending on connector	2.56 mm
Power at room temperature, at 2.4 GHz	typical 260 W (MBX) typical 240 W (MBX ^{2nd})	typical 130 W	typical 260 W

Series MBX – PCB connectors

Straight PCB jacks (female)

Surface mount type SMT

- MBX

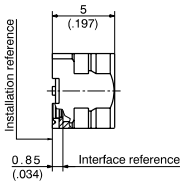


Fig. 1

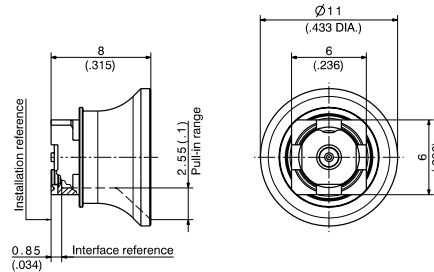


Fig. 2



HUBER+SUHNER type	Item no.	Packaging	Soldering pad	Fig.
82_MBX-S50-0-1/111_NE	84104680	single	ML 173	1
82_MBX-S50-0-1/111_NH	84094199	bulk 100 pcs.		
82_MBX-S50-0-1/111_NM	84094200	tape and reel		
82_MBX-S50-0-2/113_NE	84104681	single	ML 173	2
82_MBX-S50-0-2/113_NH	84094287	bulk 100 pcs.		
82_MBX-S50-0-2/113_NM	84094288	tape and reel		

Surface mount type SMT

- MBX 2nd generation

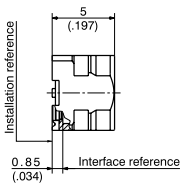


Fig. 1

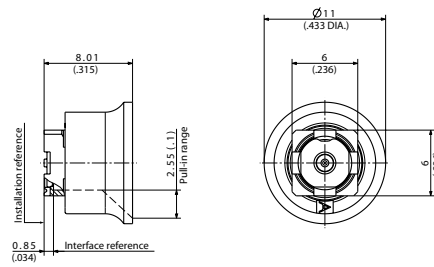


Fig. 2



HUBER+SUHNER type	Item no.	Packaging	Soldering pad	Fig.
82_MBX-S50-0-23/111_NE	85018772	single	ML 173	1
82_MBX-S50-0-23/111_NH	85018773	bulk 100 pcs.		
82_MBX-S50-0-23/111_NM	85015265	tape and reel		
82_MBX-S50-0-24/111_NE	85018775	single	ML 173	2
82_MBX-S50-0-24/111_NH	85018776	bulk 100 pcs.		
82_MBX-S50-0-24/111_NM	85018774	tape and reel		

Series MBX – PCB connectors

Straight PCB jacks (female)

Through hole type THT

- MBX

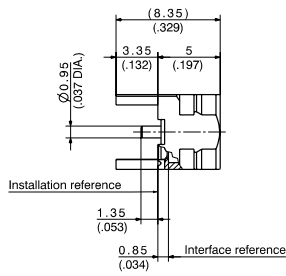


Fig. 1

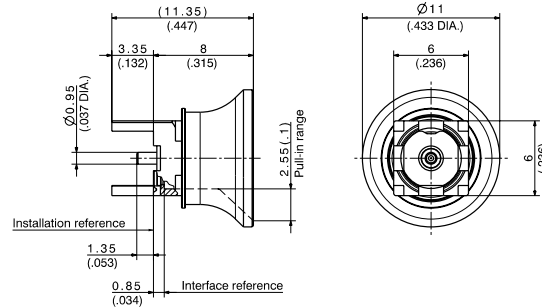


Fig. 2



HUBER+SUHNER type	Item no.	Packaging	Soldering pad	Fig.
82_MBX-50-0-3/111_NE	84104683	single	ML 174	1
82_MBX-50-0-3/111_NH	84094366	bulk 100 pcs.		
82_MBX-50-0-3/111_NM	84094369	tape and reel		
82_MBX-50-0-4/113_NE	84104684	single	ML 174	2
82_MBX-50-0-4/113_NH	84094405	bulk 100 pcs.		
82_MBX-50-0-4/113_NM	84094406	tape and reel		

Through hole type THT

- MBX 2nd generation

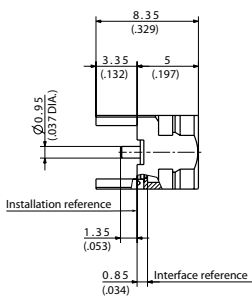


Fig. 1



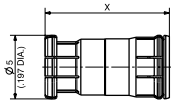
HUBER+SUHNER type	Item no.	Packaging	Soldering pad	Fig.
82_MBX-50-0-28/111_NE	85018976	single	ML 174	1
82_MBX-50-0-28/111_NH	85018972	bulk 100 pcs.		
82_MBX-50-0-28/111_NM	85018970	tape and reel		

Series MBX – adaptors within series

Straight adaptors

Plug to plug (male)

- MBX



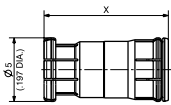
Black insulator: slide-side
White insulator: snap-side

HUBER+SUHNER type	Item no.	Packaging	Board-to-board distance	Adaptor length X
32_MBX-50-0-1/111_NE 32_MBX-50-0-1/111_NH	84104690 84142599	single bulk 100 pcs.	13 mm/0.512 in.	9.7 mm/0.382 in.
32_MBX-50-0-2/111_NE 32_MBX-50-0-2/111_NH	84104691 84094285	single bulk 100 pcs.	18 mm/0.709 in.	14.7 mm/0.579 in.
32_MBX-50-0-3/111_NE 32_MBX-50-0-3/111_NH	84104692 84094387	single bulk 100 pcs.	28 mm/1.102 in.	24.6 mm/0.969 in.

Adaptors with other lengths available upon request.

Plug to plug (male)

- MBX 2nd generation



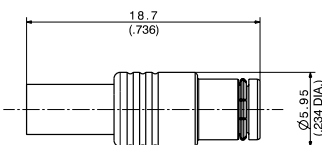
Black insulator: slide-side
White insulator: snap-side

HUBER+SUHNER type	Item no.	Packaging	Board-to-board distance	Adaptor length X
32_MBX-50-0-1/133_NE 32_MBX-50-0-1/133_NH	85001197 85001201	single bulk 100 pcs.	13 mm/0.512 in.	9.7 mm/0.382 in..
32_MBX-50-0-2/133_NE	85001211	single	18 mm/0.709 in.	14.7 mm/0.579 in.

Adaptors with other lengths available upon request.

Series MBX – cable connectors

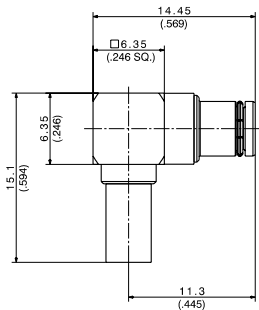
Straight cable plugs (male)



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction
11_MBX-50-2-1 / 113_NE 11_MBX-50-2-1 / 113_NH	84104694 84093696	U4 (ENVIROFLEX_316_D)	single bulk 100 pcs.	0000333519

Series MBX - cable connectors

Right angle cable plugs (male)



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction
16_MBX-50-2-1 / 113_NE	84104696	U4 (ENVIROFLEX_316_D)	single	0000326568
16_MBX-50-2-1 / 113_NH	84093680		bulk 100 pcs.	

Series MBX - receptacles with solder end

Receptacles, jack (female)

- MBX

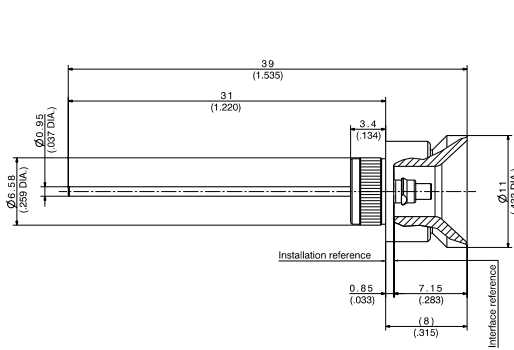


Fig. 1

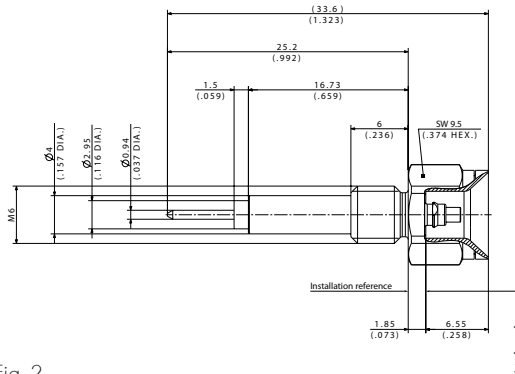


Fig. 2



HUBER+SUHNER type	Item no.	Packaging	Assembly instruction	Fig.
22_MBX-50-0-1/113_NY	84097667	industrial 100 pcs.	pressed-in	1
22_MBX-50-0-2/113_NY	84095796		screwed-in	2

Series MFBX – PCB connectors

Straight PCB jacks (female)

Surface mount type SMT

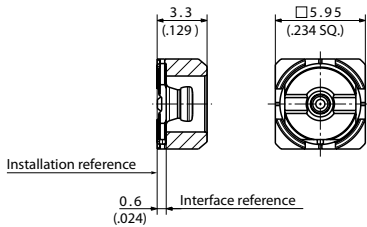


Fig. 1

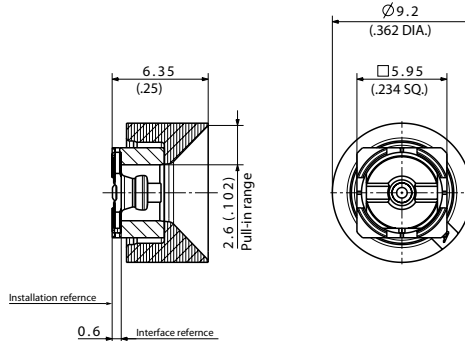


Fig. 2



HUBER+SUHNER type	Item no.	Packaging	Soldering pad	Fig.
82_MFBX-S50-0-8/111_NE	85025296	single	ML 173	1
82_MFBX-S50-0-8/111_NM	85025295	tape and reel		
82_MFBX-S50-0-6/111_NE	85025293	single	ML 173	2
82_MFBX-S50-0-6/111_NM	85025282	tape and reel		

Through hole type THT

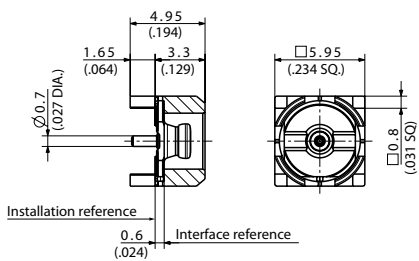


Fig. 1

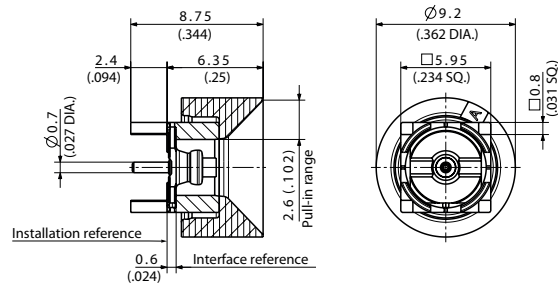


Fig. 2

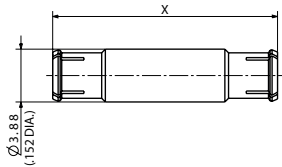


HUBER+SUHNER type	Item no.	Packaging	Soldering pad	Fig.
82_MFBX-50-0-3/111_NE	85025488	single	ML 182	1
82_MFBX-50-0-3/111_NM	85025089	tape and reel		
82_MFBX-50-0-4/111_NE	85025490	single	ML 182	2
82_MFBX-50-0-4/111_NM	85025096	tape and reel		

Series MFBX – adaptors within series

Straight adaptors (machining)

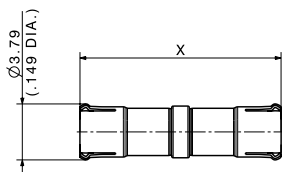
Plug to plug (male)



HUBER+SUHNER type	Item no.	Packaging	Board-to-board distance	Adaptor length X
32_MFBX-50-0-1/111_NE	85025361	single	18.9 mm/0.74 in.	16.52 mm/0.65 in.

Straight adaptors (stamp and bending)

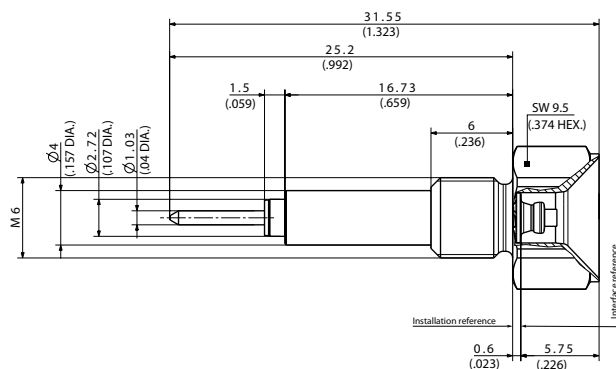
Plug to plug (male)



HUBER+SUHNER type	Item no.	Packaging	Board-to-board distance	Adaptor length X
32_MFBX-50-0-3/111_NH-2	85096448	bulk 1000 pcs	16 mm/0.63 in.	13.62 mm/0.54 in.
32_MFBX-50-0-4/111_NH-2	85096450	bulk 1000 pcs	22.3 mm/0.88 in.	19.92 mm/0.78 in.

Series MFBX – receptacle with solder end

Receptacle, jack (female)



HUBER+SUHNER type	Item no.	Packaging	Assembly instruction
22_MFBX-50-0-3/133_NY	85013940	industrial 100 pcs.	screwed-in

Series MMBX – PCB connectors

Straight PCB jacks (female)

- Surface mount type SMT

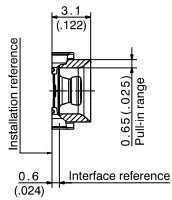


Fig. 1

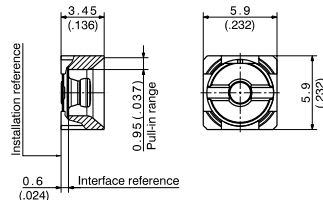


Fig. 2

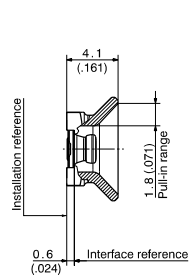


Fig. 3

HUBER+SUHNER type	Item no.	Packaging	Soldering pad	Notes	Fig.
82_MMBX-S50-0-1/111_NE	23001785	single	ML 122	pull-in range 0.65 mm/0.0256 in.	1
82_MMBX-S50-0-1/111_NH	23001784	bulk 100 pcs.			
82_MMBX-S50-0-1/111_NM	23001783	tape and reel			
82_MMBX-S50-0-3/111_NE	23015527	single	ML 122	pull-in range 0.95 mm/0.0374 in.	2
82_MMBX-S50-0-3/111_NH	23011273	bulk 100 pcs.			
82_MMBX-S50-0-3/111_NM	23031931	tape and reel			
82_MMBX-S50-0-13/111_NE	84032435	single	ML 122	pull-in range 1.80 mm/0.0709 in.	3
82_MMBX-S50-0-13/111_NH	23036608	bulk 100 pcs.			
82_MMBX-S50-0-13/111_NM	23041511	tape and reel			

Series MMBX – PCB connectors

Straight PCB jacks (female)

- Through hole type THT

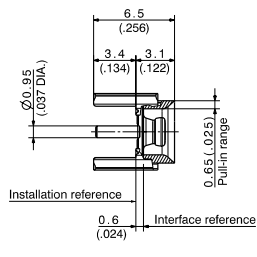


Fig. 1

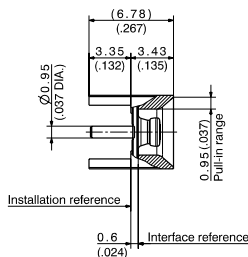


Fig. 2

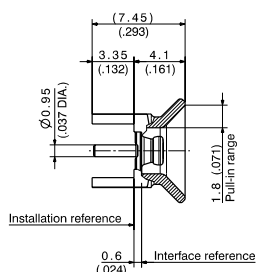
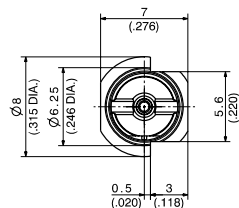
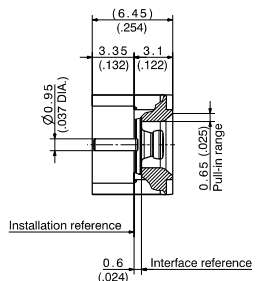


Fig. 3



HUBER+SUHNER type	Item no.	Packaging	Mounting hole	Notes	Fig.
82_MMBX-50-0-2/111_NE	23001788	single	ML 15	pull-in range 0.65 mm/0.0256 in.	1
82_MMBX-50-0-2/111_NH	23001787	bulk 100 pcs.			
82_MMBX-50-0-2/111_NM	23001786	tape and reel			
82_MMBX-50-0-4/111_NH	23013667	bulk 100 pcs.		pull-in range 0.95 mm/0.00374 in.	2
82_MMBX-50-0-14/111_NE	84032421	single		pull-in range 1.80 mm/0.0709 in.	3
82_MMBX-50-0-14/111_NH	23038051	bulk 100 pcs.			

Straight PCB jacks (female), edge mount

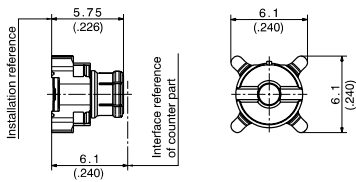


HUBER+SUHNER type	Item no.	Packaging	Mounting hole
92_MMBX-S50-0-12/111_NE	84019159	single	ML 147
92_MMBX-S50-0-12/111_NM	23038620	tape and reel	

Series MMBX – PCB connectors

Straight PCB plugs (male)

- Surface mount type SMT



HUBER+SUHNER type	Item no.	Packaging	Soldering pad
81_MMBX-S50-0-1/111_NE	23001782	single	ML 122
81_MMBX-S50-0-1/111_NH	23001781	bulk 100 pcs.	
81_MMBX-S50-0-1/111_NM	23001780	tape and reel	

- Through hole type THT

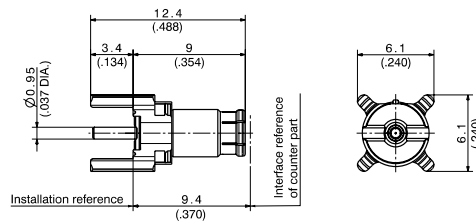
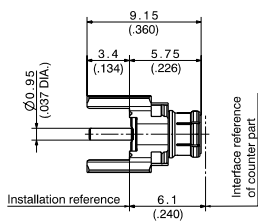


Fig. 1

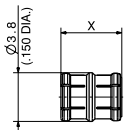
Fig. 2

HUBER+SUHNER type	Item no.	Packaging	Mounting hole	Fig.
81_MMBX-50-0-2/111_NE	23001779	single	ML 15	1
81_MMBX-50-0-2/111_NH	23001778	bulk 100 pcs.		
81_MMBX-50-0-2/111_NM	23001776	tape and reel		
81_MMBX-50-0-11/111_NM	23028072	tape and reel		2

Series MMBX – adaptors within series

Straight adaptors

- Plug to plug (male)



HUBER+SUHNER type	Item no.	Packaging	Board-to-board distance	Adaptor length X	Min. pull-in range
32_MMBX-50-0-1/111_NE 32_MMBX-50-0-1/111_NY	23001749 84028418	single industrial 200 pcs.	6.7 mm/0.264 in.	4.8 mm/0.189 in.	0.65 mm/0.026 in. ¹⁾
32_MMBX-50-0-12/111_NH	84004734	bulk 100 pcs.	8.0 mm/0.315 in.	6.0 mm/0.236 in.	0.95 mm/0.037 in.
32_MMBX-50-0-4/111_NE 32_MMBX-50-0-4/111_NY	23010564 23038658	single industrial 300 pcs.	10.0 mm/0.394 in.	8.0 mm/0.315 in.	1.80 mm/0.071 in.
32_MMBX-50-0-13/111_NE	84031096	single	12.0 mm/0.472 in.	10.0 mm/0.417 in.	1.80 mm/0.071 in.
32_MMBX-50-0-5/111_NE 32_MMBX-50-0-5/111_NY	84026915 23011920	single industrial 200 pcs.	14.0 mm/0.551 in.	12.0 mm/0.472 in.	1.80 mm/0.071 in.
32_MMBX-50-0-10/111_NY	23034946	industrial 200 pcs.	15.0 mm/0.591 in.	13.0 mm/0.512 in.	1.80 mm/0.071 in.

Adaptors with other lengths available upon request.

¹⁾ Only suitable pull-in-range.