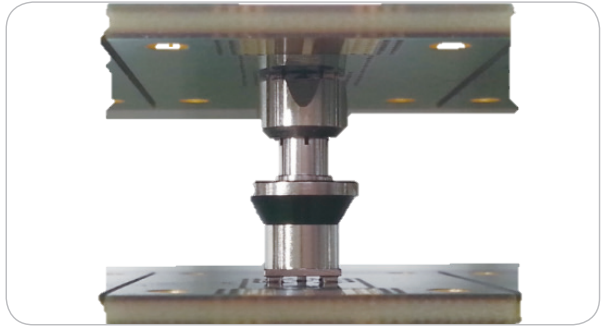


GigaLane High Power
Board to Board Connectors
GHBB Connectors



GigaLane Small-size
Board to Board
GSBB Connectors



GigaLane Direct
Board Contact
GDBC 1 Connectors



GigaLane Direct
Board Contact
GDBC 2 Connectors



GigaLane
Blind Mating Connectors



Perfect solution for multiple connections
from board-to-board and complex stack-up



GigaLane
Blind Mating Connectors

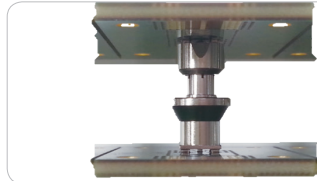
- Reliable & Robust
- Various options
 - High power, Small size, Direct contact, Low weight, Working range

Customization

ITEM	Specification		GHBB	GSBB	GDBC1	GDBC2
Electrical	Frequency Range		DC ~ 6 GHz	DC ~ 8.5GHz	DC ~ 6 GHz	DC ~ 6 GHz
	VSWR		1.30:1 @ 6 GHz	1.22:1 @ 6 GHz 1.30:1 @ 8.5 GHz	1.12:1 @ 3 GHz 1.17:1 @6 GHz	1.12:1 @ 3 GHz 1.17:1 @ 6 GHz
	PIMD		-165 dBc	-160 dBc	-130 dBc	-115 dBc
	Power Rating		250W @ 2.7 GHz	100W @ 2.7 GHz	120W @ 2.7 GHz	80W @ 2.7 GHz
Mechanical	Mating Cycles		200 Cycles	200 Cycles	100 Cycles	100 Cycles
	Working Range	Axial	± 1 mm	± 0.6 mm	± 0.6 mm	± 0.3 mm
		Radial	± 1 mm	± 0.5 mm	± 0.5 mm	± 0.3 mm
	Area		8.7 X 8.7 mm ²	3.8 X 3.8 mm ²	Ø 10.5 mm	Ø 13 mm
	Mating Height		Min. 18 mm	Min. 10 mm	Min. 7 mm	Min. 7 mm
Environmental	Operating Temperature		- 40 °C ~ + 125 °C	- 55 °C ~ + 125 °C	- 55 °C ~ + 125 °C	- 55 °C ~ + 125 °C
	Corrosion		72hr	72hr	72hr	72hr

GigaLane High Power

Board to Board Connectors GHBB Connectors



GigaLane **high power Board to Board connectors** are especially developed for board-to-board and board-to-module RF interconnections. It is the perfect solution for multiple connections from board-to-board and complex stack-ups in radio module applications.

Electrical Specifications

Frequency	DC ~ 6 GHz	
Impedance	50 Ω	
Return Loss	3 GHz	6 GHz
	- 20 dB	- 17.6 dB
Insertion Loss	Max. 0.15 dB @3 GHz, Max. 0.35 dB @6 GHz	
Insulation resistance	5000 MΩ min.	
Contact resistance	Center resistance 6 mΩ Max. / Outer resistance 4 mΩ Max	
Proof Voltage	1500 Vrms	
Working voltage	500 Vrms	
Inter Modulation	2 X 20 W : ≥ 165 dBc (IM3, 1.8 GHz)	
Power Handling	Max. 250 W (CW @ 2.1 GHz, + 25℃)	
	Peak Power 1,500 W (Peak Power, + 25℃)	

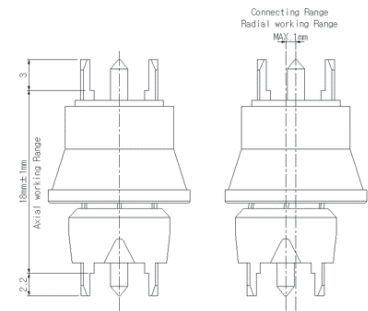
Mechanical Specification

Mating Cycle	> 200	
Center Contact Captivation (axial force)	> 20 N	
Mating Force	Engagement : typ. 20 N	
	Disengagement : typ. 15 N	
Distance PCB to PCB	18.0 mm	
Misalignment	Axial	±1.0 mm
	Radial	±1.0 mm

Environment Specification

Temperature	- 40°C ~ + 125°C	
Climatic category	40 / 125 / 10	
Thermal Shock	MIL-STD-202, Method 107, Condition B	
Vibration	MIL-STD-202, Method 204, Condition A	
Shock	MIL-STD-202, Method 107, Condition B	
Corrosion salt Spray	MIL-STD-202, Method 101, Condition B	
Moisture Resistance	MIL-STD-202, Method 106	

Drawing



PCB to PCB	Axial working range	Radial working Range
18.0 mm	17.0 ~ 19.0 mm	±1.0 mm

GigaLane Small-size Board to Borad GSBB Connectors



GigaLane **Small-size Board to Board Connectors** are especially developed for board-to-board and board-to-module RF interconnections. It is the perfect solution for multiple connections from board-to-board and complex stack-ups in radio module applications.

Electrical Specifications

Frequency	DC ~ 8.5 GHz			
Impedance	50 Ω			
Return Loss	Misalignment		6 GHz	8.5 GHz
	Axial	Radial		
	10.4 mm	± 0.5 mm	- 20 dB	- 20 dB
	11.0 mm	± 0.5 mm	- 20 dB	- 20 dB
	11.6 mm	± 0.5 mm	- 20 dB	- 17.6 dB
Insertion Loss	Max. 0.15 dB @ 6 GHz, Max. 0.35 dB @ 8.5 GHz			
PIMD (1.8GHz, 3 rd)	20W (43 dBm) x 2		160 dBc	
RF Leakage (TEM Cell)	Min. 75 dBc @ 3G Hz, Min. 65 dBc @ 6 GHz			
Power Rating	140W @ 3.1 GHz			

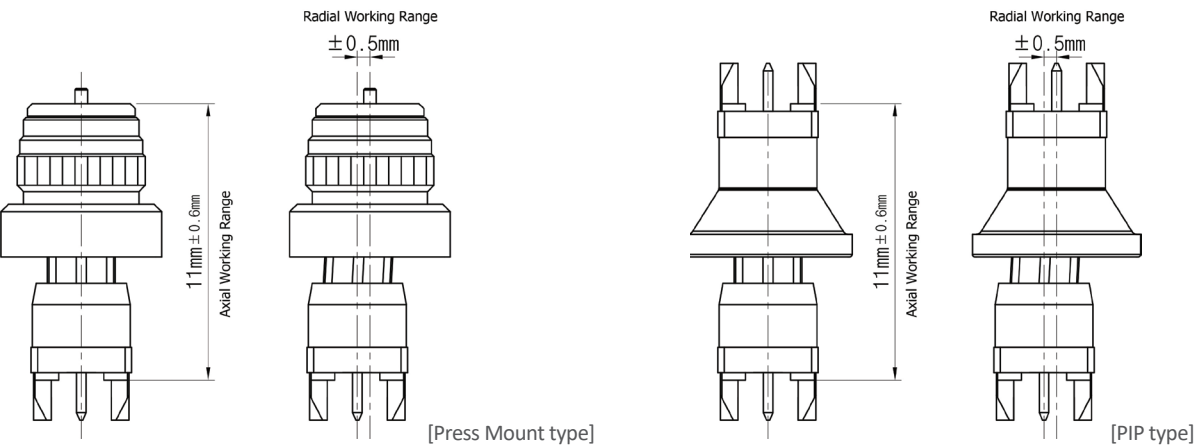
Mechanical Specification

Distance PCB to PCB	10 mm	
Misalignment	Axial	± 0.6 mm
	Radial	± 0.5 mm

Environment Specification

Temperature	- 40°C / + 125°C
Thermal Shock	MIL-STD-202, Method 107, Condition B
Vibration	MIL-STD-202, Method 204, Condition A
Shock	MIL-STD-202, Method 213, Condition A
Corrosion salt Spray	MIL-STD-202, Method 101, Condition B
Moisture Resistance	MIL-STD-202, Method 106

Drawing & Application



GigaLane Direct Board Contact GDBC 1 Connectors



GigaLane **Direct Board Contact Connectors** are especially developed for board-to-module RF interconnections. It is the perfect solution for multiple connections from board-to-board and complex stack-ups in radio module applications.

Electrical Specifications

Frequency	DC ~ 6 GHz				
Impedance	50 Ω				
Return Loss	Misalignment			3 GHz	6 GHz
	Axial	Radial	Tilt		
	7.6 mm	± 0.5 mm	± 2°	- 25 dB	- 22 dB
	7.0 mm	± 0.5 mm	± 2°	- 25 dB	- 23 dB
	6.4 mm	± 0.5 mm	± 2°	- 25 dB	- 23 dB
Insertion Loss	0.15 dB Max.				
PIMD (1.8GHz, 3 rd)	10W (40 dBm) x 2			130 dBc	
	20W (43 dBm) x 2			130 dBc	
RF Leakage (TEM Cell)	Min. 75 dBc @ 3 GHz, Min. 65 dBc @ 6 GHz				
Power Rating	120W @ 2.7 GHz (CW)				

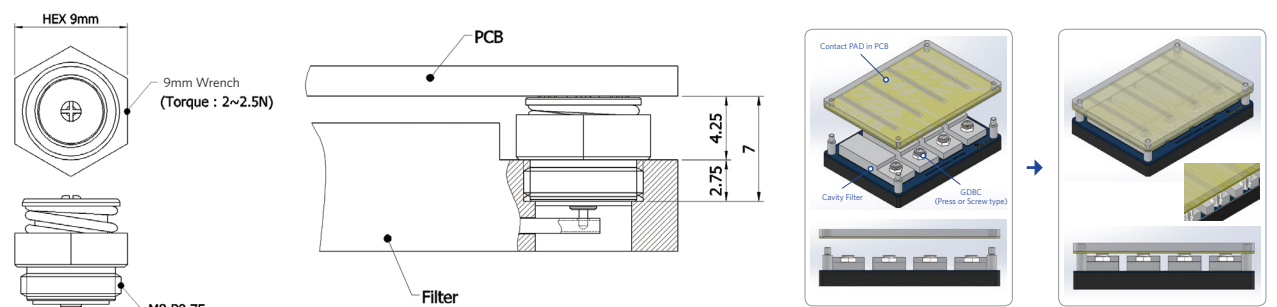
Mechanical Specification

Distance PCB to PCB	7 mm	
Misalignment	Axial	± 0.6 mm
	Radial	± 0.5 mm

Environment Specification

Temperature	- 40°C / + 125°C
Thermal Shock	MIL-STD-202, Method 107, Condition B
Vibration	MIL-STD-202, Method 204, Condition A
Shock	MIL-STD-202, Method 213, Condition A
Corrosion salt Spray	MIL-STD-202, Method 101, Condition B
Moisture Resistance	MIL-STD-202, Method 106

Drawing & Application



GigaLane Direct Board Contact GDBC 2 Connectors



GigaLane **Direct Board Contact Connectors** are especially developed for board-to-module RF interconnections. It is the perfect solution for multiple connections from board-to-board and complex stack-ups in radio module applications.

Electrical Specifications

Frequency	DC ~ 6 GHz			
Impedance	50 Ω			
Return Loss	Misalignment		3 GHz	6 GHz
	Axial	Radial		
	7.3 mm	± 0.3 mm	- 25 dB	- 22 dB
	7.0 mm	± 0.3 mm	- 25 dB	- 23 dB
	6.7 mm	± 0.3 mm	- 25 dB	- 23 dB
Insertion Loss	0.15 dB Max.			
PIMD (1.8GHz, 3 rd)	10W (40 dBm) x 2		120 dBc	
	20W (43 dBm) x 2		115 dBc	
RF Leakage (TEM Cell)	Min. 70 dBc @ 3 GHz, Min. 60 dBc @ 6 GHz			
Power Rating	80W @ 2.7GHz (CW)			

Mechanical Specification

Distance PCB to PCB	7.0 mm	
Misalignment	Axial	± 0.3 mm
	Radial	± 0.3 mm

Electrical Specifications

Temperature	- 40°C / + 125°C
Thermal Shock	MIL-STD-202, Method 107, Condition B
Vibration	MIL-STD-202, Method 204, Condition A
Shock	MIL-STD-202, Method 213, Condition A
Corrosion salt Spray	MIL-STD-202, Method 101, Condition B
Moisture Resistance	MIL-STD-202, Method 106

Drawing & Application

