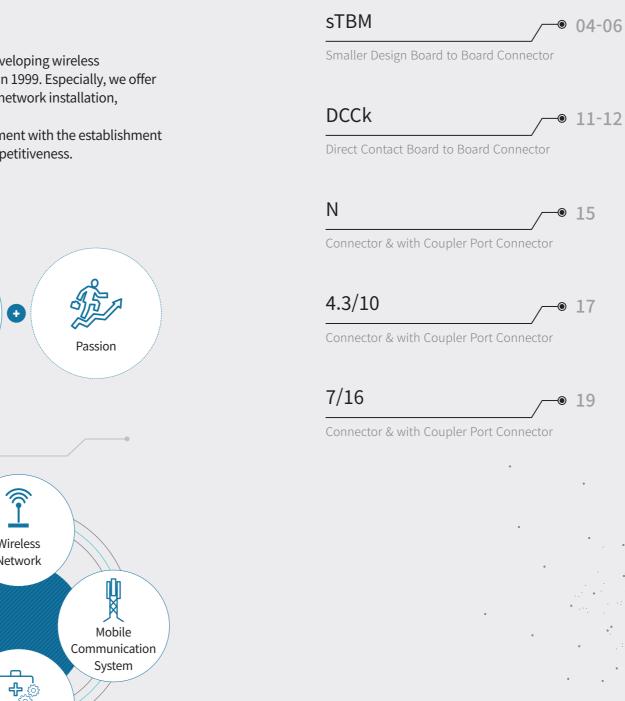


# RF CONNECTORS



# Simple Connectivity Solution

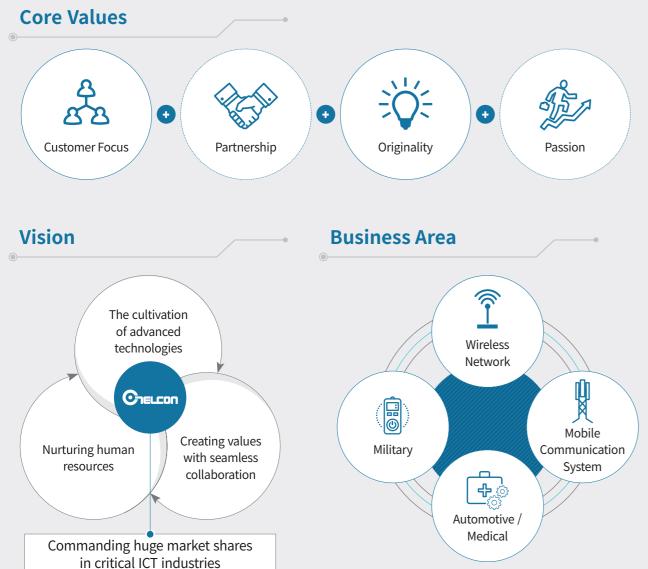
# Contents

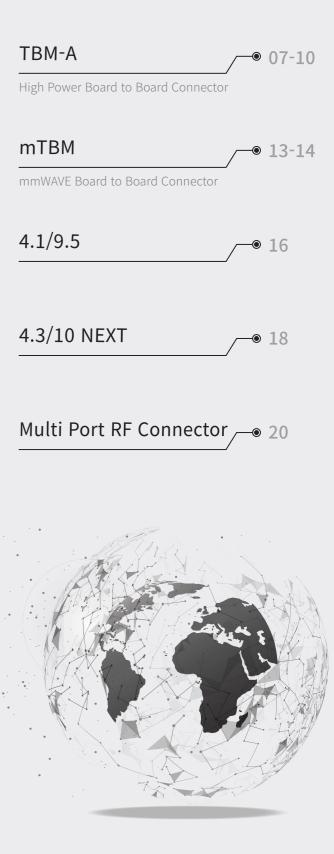


#### **Company Infomation**

Telcon seeks to develop the best technology by continuous investments in developing wireless communication parts which are essential for ICT business since the founding in 1999. Especially, we offer high-quality services in the fields of wireless communication device, wireless network installation, and communication system.

Moreover, our business area has expanded to automotive and medical equipment with the establishment of local subsidiaries in China and Vietnam, which help us enhance global competitiveness.







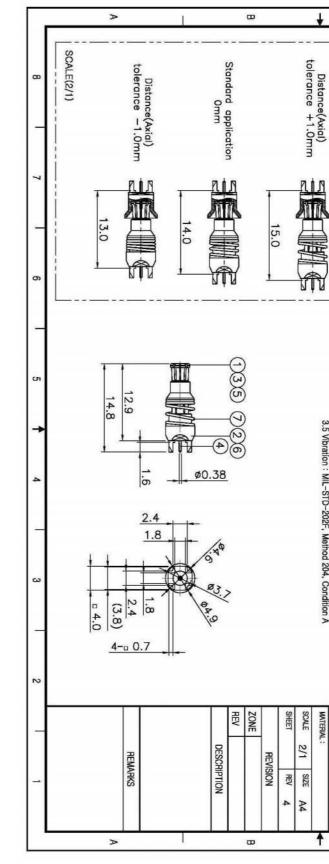
#### **Smaller Design Board to Board Connector**

STBM is optimized solution that has smaller design, and misalignment limit between connectors in the compact, and narrow inside of equipment, it supports stable electrical Performance as well.



- High density interconnection
- Stable electrical and mechanical blind mating interface
- Competitive price

	Parameter		Value				
Frequency Range		DC ~ 8.5GHz					
Impedance		50ohm(Nominal)	50ohm(Nominal)				
	Working Range	3GHz	6GHz	8.5GHz			
Typical	Axial +1.0mm(Radial 0,0.6mm)	1.25	1.30	1.35			
VSWR	Axial 0mm(Radial 0,0.6mm)	1.18	1.25	1.30			
	Axial -1.0m(Radial 0,0.6mm)	1.25	1.30	1.35			
Insertion Loss		> -0.07 x √f(GHz)		^			
Insulation resistan	ce	> 5000MΩ					
Working voltage		< 330 Vrms 60Hz, s	ea level				
Contact Resistance	(mOhm)	Inner Contact ≤6.	Inner Contact ≤6.0mΩ				
Contact Resistance	(monm)	Outer Contact $\leq$ 3.	Outer Contact $\leq$ 3.0m $\Omega$				
Screening Effective	eness	<b>C</b> .	>70dB@3GHz (Zero, Max tolerance) >65dB@6GHz (Zero, Max tolerance)				
Input Dowor		< 100W @2.6GHz, +25°C, CW					
Input Power	2Tone x 43dBm, 3th	<100W @2.00H2, 123 C, CW					
Inter-modulation	2Tone x 40dBm, 3th	<155dBc					
3rd order	2Tone x 37dBm, 3th	<160dBc					
Durability	210he x 31dbill, 5th	100matings					
,	Temperature / Humidity Range		-40°C ~ +125°C / 65°C, 80%				
Axial misalignment		$\pm 0.6$ mm (Minimum distance when contrary dimension)					
/ wat modigninem		Body : Bs, BeCu(3MAT'L)					
Material (Finish)		Inner : BeCu, Bs(Au					
		Insulator : PTFF	<i>a j</i>				



No         PAIT NUME         SEPECIFICATION         OTY         REMARKS         NOTES         .	0	it.			C	1				
B         M         SECEPCATION         OTT         REMARKS         NO         PART MALE         DESCRIPTION         REMARKS         REMARKS </td <td></td> <td>7</td> <td>6</td> <td>5</td> <td>4</td> <td>3</td> <td>2</td> <td>-</td> <td>NO</td> <td></td>		7	6	5	4	3	2	-	NO	
OTY         REMARKS         NO         PART NAME         DESCRIPTION         REMARKS         REVNO         DATE           1		SPRING	INSULATOR	INSULATOR	PIN	PIN	BODY COVER	BODY	PART NAME	8
B         NOTES         NOTES         NOTES         NUTES         NUME         DESCRIPTION         REMARKS         REV ID         DATE           I. ELECTRICAL         1. Sources 1. Sources 1. ELECTRICAL		STS304, PASSIVITY	TEFLON(PTFE)	TEFLON(PTFE)	BeCu(C1730 B), Au PLATING	BeCu(C1730 B), Au PLATING	Bs(C3604 BD), 3MAT'L PLEATING	Becu(C1730 B), 3MAT'L PLATING		1 7
NO         PART NUME         DESCRIPTION         REMARKS         REV NO         DATE           NOTES         1.         ELECTRICAL         1.1         FREQUENCE FRANCE : 500 NOMINAL         1.3         VIELE         1.2         INFERUNCE : 500 NOMINAL         1.3         VIELE         1.3         VIELE         1.4         INSERTION LOSS : -0.07 X # FIFREQUENCY(GHz)         1.4         INSERTION LOSS : -0.07 X # FIFREQUENCY(GHz)         INFERION LOSS : -0.07 X # FIFREQUENCY(GHz)         INFERION         DESMAN         DESMAN <td< td=""><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td></td<>		-	-	-	-	-	-	-	-	
PART NUME         DESCRIPTION         REMARKS         REV NO         DATE           NOTES         1.         ELECTRICAL         1.         I.         ELECTRICAL         NUME         SIGN           1.1 FREQUENCY RANGE : DC-6.5GHz         1.1 FREQUENCY RANGE : DC-6.5GHz         1.2 IMPEDANCE : S00 NOIMLAL         I.3 VSWR : 1.30 Max (Typical)         I.4 INSERTION LOSS : -0.07 x 4f FFREQUENCY(GHz)         I.5 Insulation Resistance : 500 MMB MIN.         I.5 Insulation Resistance : 500 MMB MIN.         I.6 ENEXT         I.7 PIMO         I.7.1 SW (2Tone x 37dBm, 3th) : -160dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 10W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.3 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.3 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.3 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.3 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.1 SW (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.1 SW (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.3 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.1 SW (2TONE X 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.1 SW (2TONE X 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2TONE X 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2TONE X 43dBm, 3th) : -150dBc MAX.							11		REMARKS	6
PART NUME         DESCRIPTION         REMARKS         REV NO         DATE           NOTES         1.         ELECTRICAL         1.         I.         ELECTRICAL         NUME         SIGN           1.1 FREQUENCY RANGE : DC-6.5GHz         1.1 FREQUENCY RANGE : DC-6.5GHz         1.2 IMPEDANCE : S00 NOIMLAL         I.3 VSWR : 1.30 Max (Typical)         I.4 INSERTION LOSS : -0.07 x 4f FFREQUENCY(GHz)         I.5 Insulation Resistance : 500 MMB MIN.         I.5 Insulation Resistance : 500 MMB MIN.         I.6 ENEXT         I.7 PIMO         I.7.1 SW (2Tone x 37dBm, 3th) : -160dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 10W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.3 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.3 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.3 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.3 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.1 SW (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.1 SW (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.3 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.1 SW (2TONE X 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2Tone x 43dBm, 3th) : -150dBc MAX.         I.7.1 SW (2TONE X 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2TONE X 43dBm, 3th) : -150dBc MAX.         I.7.2 20W (2TONE X 43dBm, 3th) : -150dBc MAX.										_
4         3         2         1           RIPTION         REMARKS         REV NO         DATE         Once           RIPTION         REMARKS         REV NO         DATE         Once           Y PANGE : DC-6.5GHz         E : 500, NOMINAL         MMR         Isian           LOSS : -0.07 x /f :FREQUENCY(GHz)         MMR         Isian         Design           LOSS : -0.07 x /f :FREQUENCY(GHz)         Design         Design         Design           LOSS : -0.07 x /f :FREQUENCY(GHz)         Design         Design         Design           LOSS : -0.07 x /f :FREQUENCY(GHz)         Design         Design         Design           LOSS : -0.07 x /f :FREQUENCY(GHz)         Design         Design         Design           LOSS : -0.07 x /f :FREQUENCY(GHz)         Design         Design         Design           LOSS : -0.07 x /f :FREQUENCY(GHz)         Design         Design         Design           LOSS : -0.07 x /f :FREQUENCY(GHz)         Design         Design         Design           LOSS : -0.07 x /f :FREQUENCY(GHz)         Design         Design         Design           (2Tone x 37dBm, 3th) : -150dBc MAX.         Mission cell         Design         Discon cell         Discon cell           (2Tone x 43dBm, 3th) : -150dBc MAX.         STEM PCB	2. ME 2.2.3 3. EN 3.2.3 3.1 3.2 3.2 3.2	17		1.4	12	1.1	NO	NOT		сл •
ATE OPECATION MALE SIGN DRAWING DESIGN OFFICIAL APPROVAL OFFICIAL STORE IN MALESS OTHERWISE SPECIFIC DIMENSIONS ARE IN MALE STORE MOLUNIT PLE MODEL NAME : STEM PCB MOLUNIT PLE RECEPTACLE PART NAME : ASS'Y(APPROVAL SPEC: - CODE NO : TG16CN6402	1.7.1 SW (210ne X 43dBm 1.7.2 10W (210ne X 43dBm 1.7.3 20W (210ne X 43dBm 1.7.3 20W (210ne X 43dBm 1.7.3 20W (210ne X 43dBm 1.7.3 20W (210ne X 43dBm 2.5.4 100 CYCLeS Board to Board Distance : 4 Board to Board Distance : 40.6mm VIRONMENTAL VIRONMENTAL TEMPERATURE BAUGE : 2 Thermal Shock : MIL-STD- 2 Corrosion (Satt Mist) : MIL- 1 Moisture Resistance : MIL-	7 PIMD	Dower Handling : 100W MI	INSERTION LOSS : -0.07 x	IMPEDANCE : 502 NOMINA	FREQUENCY RANGE : DC-			DESCRIPTION	4
ATE OPECATION MALE SIGN DRAWING DESIGN OFFICIAL APPROVAL OFFICIAL STORE IN MALESS OTHERWISE SPECIFIC DIMENSIONS ARE IN MALE STORE MOLUNIT PLE MODEL NAME : STEM PCB MOLUNIT PLE RECEPTACLE PART NAME : ASS'Y(APPROVAL SPEC: - CODE NO : TG16CN6402	(4.0±1.0mm(with TG16CN84) (4.0±1.0mm(with TG16CN84) (4.0±1.0mm(with TG16CN84) (0℃ ~ +125℃ 202F, Method 107, Condition STD-202F, Method 108 STD-202F, Method 106	SHIT - IENADA MAY	0M2 MIN.	vit f:FREQUENCY(GHz)	F	8.5GHz			REMARKS	3
MILESS CITHERWISE SPECIE MODELINAME SIAN DEMINAL DESIGN DE	12) B Irs Spraying]									2
Mule SIAN Mule SIAN	CO SPI PA MC		APP	욺	DES	DRA	Λ	_	m	
TI SIGN DATE	DECIMAL TO A ±0.2 STBM PCC REC ASS'Y( ASS'Y( ASS'Y( DE NO: TC	UNLESS OTH	ROVAL	Ŷ	GN	MING	NAME	G	)	-
	B MOUNT PL EPTACLE APPROVAL	IERWISE SPECIF					SIGN			-
		ED:					DATE			

sTBM



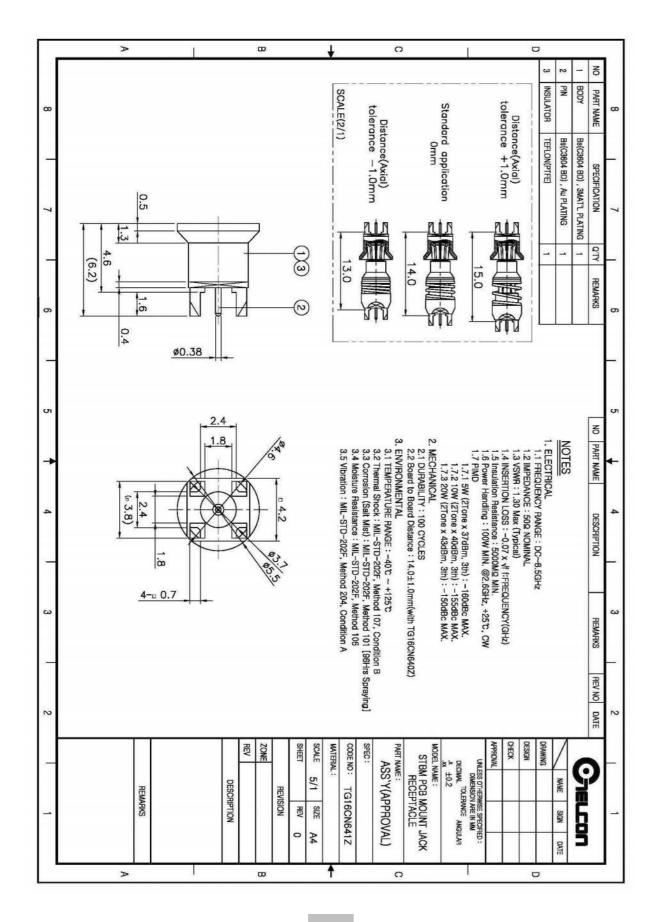
### **High Power Board to Board Connector**

TBM-A is high power transmission connector, which has misalignment limit between connectors in the compact, and mounts narrow inside of equipment. it supports stable electrical Performance as well.

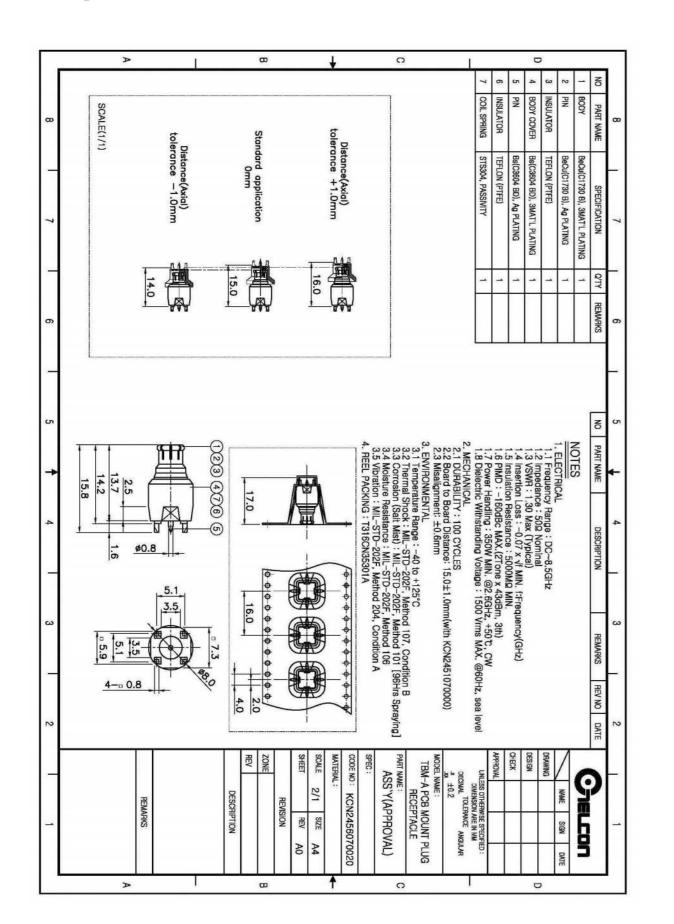


- Transit able High Power connector
- Stable electrical and mechanical blind mating interface
- Competitive price

	Parameter		Value				
Frequency Rar	nge	DC ~ 8.5GHz	DC ~ 8.5GHz				
Impedance		50ohm(Nominal)					
	Misalignment	3GHz	6GHz	8.5GHz			
Typical	Axial +1mm(Radial 0,0.8mm)	1.20	1.25	1.35			
VSWR	Axial 0mm(Radial 0,0.8mm)	1.18	1.20	1.30			
	Axial -1mm(Radial 0,0.8mm)	1.20	1.25	1.35			
Insertion Loss		> -0.07 x √f(GHz)					
Insulation resi	stance	> 5000MΩ					
Dielectric with	istanding Voltage	< 1500 V					
Working voltag	ge	< 330 Vrms 60Hz, s	ea level				
6 I I D I I		Inner Contact ≤4.0	Inner Contact ≤4.0mΩ				
Contact Resist	ance(mOhm)	Outer Contact $\leq$ 3.0m $\Omega$					
Screening Effe	octiveness	-	>80dB@3GHz (Zero, Max tolerance) >75dB@6GHz (Zero, Max tolerance)				
Input Power		< 350W @2.6GHz, +	-50°C, CW				
Inter-modulat	ion 3rd order	<160dBc @1.8GHz @ Except PCB Type	(2x43dBm) (Zero, Ma	ax tolerance)			
Durability		100matings	100matings				
Temperature /	Humidity Range	-40°C ~ +125°C / 65	-40°C ~ +125°C / 65°C, 80%				
Misalignment	tolerance	,	$\pm$ 0.8mm / $\pm$ 0.6mm / $\pm$ 0.5mm (Minimum distance when contrary dimension)				
Material (Finish)		Body : Bs, BeCu(3M Inner : BeCu, Bs(Si Insulator : PTFE Spring : STS(Passiv	lver)				



TBM-A



A ₿ + SCALE(1/1) Distance(Axial) tolerance +0.7mm Distance(Axial) tolerance -0.7mm dard application Omm 6.5 聞 578 6 1.6 \$0.8 5.1 3.5 3.5 5.1 5.9 0.0 4-0 0.8 SHEET 5 REVISION SIZE o A 1 Þ 8

TBM-A

			-	-		,				
	œ	7	6	5	4	ω	2	-	NO	
	COIL SPRING	INSULATOR	PIN	BODY COVER	HOUSING	INSULATOR	PIN	BODY	PART NAME	8
	STS304, PASSIVITY	TEFLON (PTFE)	Bs(C3604 BD), Ag PLATING	Bs(C3604 BD), 3MAT'L PLATING	Bs(C3604 BD), 3MAT'L PLATING	TEFLON (PTFE)	BeCu(C1730 B), Ag PLATING	BeCu(C1730 B), 3MAT'L PLATING	SPECIFICATION	1 7
	-	-	-	-	-	-	-	-	Q'TY	
									REMARKS	6
										_
									NO	G
<ol> <li>2.2 Board to Board Dis</li> <li>2.3 Misalignment: ±0.5</li> <li>3. ENVIRONMENTAL</li> <li>3.1 Temperature Range</li> <li>3.2 Thermal Shock : MI</li> <li>3.3 Corrosion (Salt Mis</li> <li>3.4 Moisture Resistance</li> <li>3.5 Vibration : MIL–STI</li> <li>4. REEL PACKING : TBD</li> </ol>	2. MECHANICAL	1./ Power Hi 1.8 Dielectric	1.6 PIMD : -	1.4 Insertion	1.3 VSWR : 1	1.1 Frequenc		NOTES	PART NAME	4
<ol> <li>Board Distance: 12.0±0.7mm(with KCN2451070000)</li> <li>Board Distance: 12.0±0.7mm(with KCN2451070000)</li> <li>Sin Temperature Range : -40 to +125°C</li> <li>Thermal Shock : ML=STD-202F, Method 107, Condition B</li> <li>Corrosion (Salt Mist) : MIL=STD-202F, Method 101 [96His Spraying]</li> <li>A Moisture Resistance : MIL=STD-202F, Method 106</li> <li>Si Vibration : MIL=STD-202F, Method 204, Condition A</li> <li>REEL PACKING : TBD</li> </ol>	2 1 DI IBARII ITY : 100 CYCI ES	<ol> <li>Power Handling : 350W MIN. @Z.6GHZ, +50 C, CW</li> <li>B Dielectric Withstanding Voltage : 1500 Vrms MAX. @60Hz, sea level</li> </ol>	1.6 PIMD : -160dBc MAX. (2Tone x 43dBm, 3th)	1.4 Insertion Loss : -0.07 x vf MIN. f:Frequency(GHz)	1.3 VSWR : 1.30 Max (Typical)	1.1 Frequency Range : DC~8.5GHz			DESCRIPTION	4
nm(with KCN2451070000) sthod 107, Condition B 2F, Method 101 [96Hrs Sp 2F, Method 106 264, Condition A		00 Vrms MAX. @60	Bm, 3th)	equency(GHz)					REMARKS	3
070000) on B 6Hrs Spray		)Hz, sea le							REV NO	
ing]		vel							DATE	2
** ±0.2 MODEL NAME: TBM-A PCB MOUNT PLUG RECEPTACLE PART NAME: ASS'Y(APPROVAL) SPEC: CODE ND : KCN2456070010	DECIMAL	UNLESS	APPROVAL	CHECK	DESIGN	DRAWING	/	6	)	
0.2 PCB MOUNT RECEPTACLE	TOLERAN	SS OTHERWISE SPECIF					NAME			
** ±0.2 DDEL NAME : TIBM-A PCB MOUNT PLUG RECEPTACLE FIT NAME : ASS'Y(APPROVAL) EC : DDE NO : KCN2456070010	TOLERANCE ANGULAR	UNLESS OTHERWISE SPECIFIED :					SIGN			-
) )10	R						DATE	-		

TBM-A



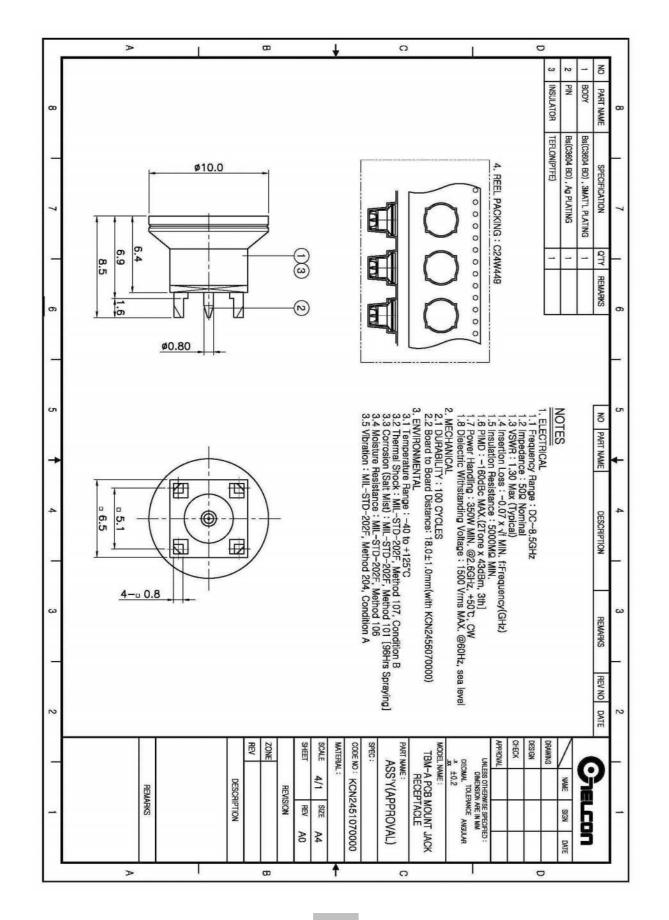
#### **Direct Contact Board to Board Connector**

DCCk provide very short distance of Board to board. And misalignment limit between connectors in the compact, and Need only one part inside of equipment, it supports stable electrical Performance as well.



Smallest Board to Board distanceStable blind mating construction

	Parameter	Value					
Frequency Range		DC ~ 8.5GHz					
Impedance		50ohm(Nominal)					
	Misalignment	3GHz	3GHz 6GHz				
Typical	Axial +1mm(Radial 0,0.8mm)	1.20	1.30	1.35			
VSWR	Axial 0mm(Radial 0,0.8mm)	1.18	1.25	1.30			
	Axial -1mm(Radial 0,0.8mm)	1.20	1.30	1.35			
Insertion Loss	·	> -0.07 x √f(GHz)					
Insulation resistant	ce	> 5000MΩ					
Dielectric withstan	ding Voltage	< 750 Vrms 60Hz, s	ea level				
Working voltage		< 330 Vrms 60Hz, s	ea level				
	( Oh)	Inner Contact $\leq$ 4.0m $\Omega$					
Contact Resistance	(mOnm)	Outer Contact $\leq$ 3.0m $\Omega$					
		>75dB@3GHz (Zero, Max tolerance)					
Screening Effective	iness	>70dB@6GHz (Zero, Max tolerance)					
Input Power		< 300W @2.6GHz, +25°C, CW					
		<150dBc @1.8GHz	(2x40dBm) (Zero, M	lax tolerance)			
Inter-modulation 3	rd order	@ Except PCB Type					
Durability		100matings					
Temperature / Hun	nidity Range	-40°C ~ +125°C / 65	-40°C ~ +125°C / 65°C, 80%				
Misalignment	Axial	±1.0 mm					
tolerance	Radial	$\pm$ 0.4mm (Minimum distance when contrary dimension		ntrary dimension			
		Body : Bs, BeCu(TCP)					
Material (Finish)	Material (Finish)		g)				
		Insulator : PTFE, P	EEK				



**DCCk** 

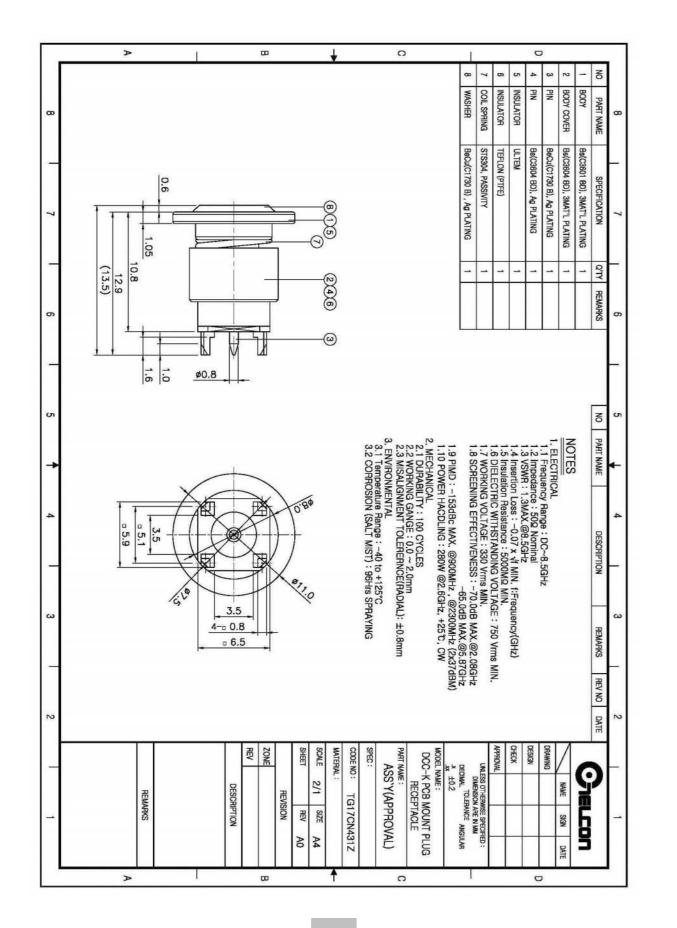
#### mmWAVE Board to Board Connector

mTBM applicable in mmWAVE equipment, and The guaranteed frequency range is up to 33GHz. misalignment limit between connectors in the compact, and narrow inside of equipment, it supports stable electrical Performance as well.

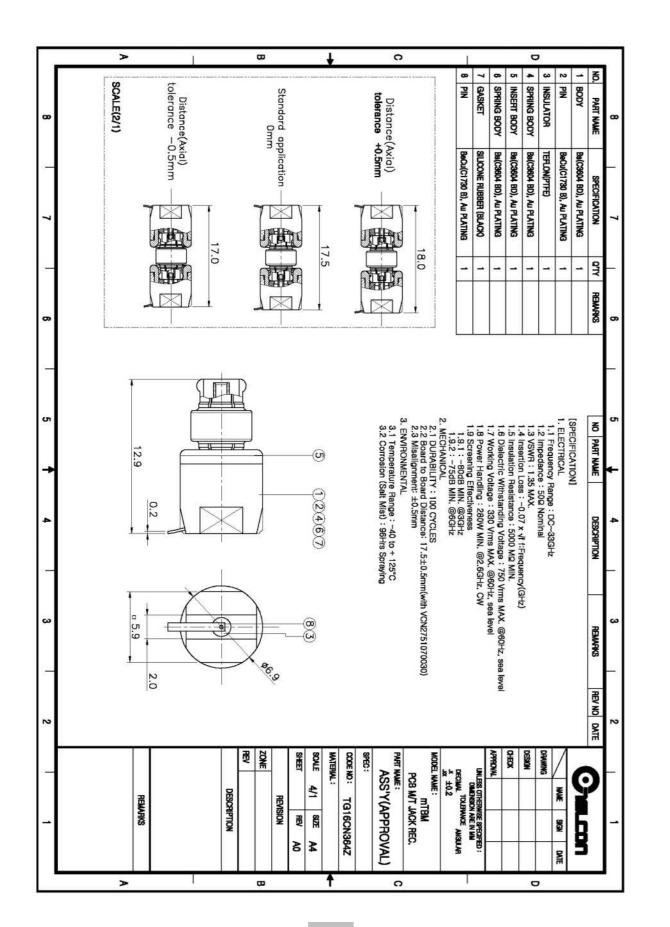


- High frequency microwave application up to 33ghz - Board to Board blind-mate construction

	Parameter	Val	lue		
Frequency Range		DC ~ 33GHz			
Impedance		50ohm(Nominal)			
	Misalignment	25GHz	33GHz		
Typical	Axial +0.5mm(Radial 0,0.5mm)	1.25	1.35		
VSWR	Axial 0mm(Radial 0,0.5mm)	1.25	1.35		
	Axial -0.5mm(Radial 0,0.5mm)	1.25	1.35		
Insertion Loss		> -0.07 x √ f(GHz)	<u></u>		
Insulation resistant	ce	< 750 Vrms @60Hz, sealevel			
Dielectric withstanding Voltage		< 330 Vrms @60Hz, sealevel			
Working voltage		> 5000MΩ			
C D		Inner Contact $\leq 4m\Omega$			
Contact Resistance	(mOnm)	Outer Contact $\leq 3m\Omega$			
· · · · · · · ·		> 80dB@3GHz (Zero tolerance, Max tolerance)			
Screening Effective	eness	> 75dB@6GHz (Zero tolerance, Max tolerance)			
Input Power		< 280W @ 2.6GHz, +25°C, Pu	lse Duty:10%		
Durability		< 100 cycles			
Operating Tempera	ature Range	-40°C ~ +125°C			
Misalignment Axial		> ± 0.5mm			
tolerance	Radial	> ± 0.5mm			
		Body : Bs, BeCu(Au)			
Material (Finish)		Inner : B eCu, Bs(Au)			
		Insulator : Ultem			
		1			



### **mTBM**(Under development)



#### **Connector & with Coupler Port Connector**

Telcon is passionate and committed to deliver unparalleled technology like the best plating technology in the name of TCP/TIP which shows unique salt resistance performance in the harsh environment as well as Low pimd performance Coupler port is installed in the connector body in order to reduce cost , and increase space efficiency.



	Parameter	Value		
Frequency Range		dc ~ 6GHz		
Impedance		50ohm(Nominal)		
Return Loss		< -23.1dB(VSWR 1.15)		
Coupling Value (Co	oupler only)	-30.0~-50.0dB @3.5GHz (±1dB Freq. Point, B/W 100MHz)		
Insertion Loss		> -0.05x √f(GHz)		
Insulation resistan	ce	> 5000MΩ		
Contract Desistance		Inner Contact ≤1.5mΩ(Max.)		
Contact Resistance		Outer Contact $\leq 1.0 m\Omega(Max.)$		
Isolation		< -90dB@1GHz		
Input Power		500W @2GHz		
PIMD		< -160dBc(+43dBm/2tone)		
Durability		500matings		
Temperature / Hun	nidity Range	-40°C ~ +85°C / 65°C, 80%		
Salt spray(5%)		720hrs		
Environment	Mating sealing	IP67		
Class	Inner sealing	IP67		
		Body : Bs(TIP)		
		Inner : BeCu, Bs(Silver)		
Material (Finish)		Insulator : PTFE		
		Gasket: Silicone rubber		
		Chain:STS(passivity)		

Ν

4.1/9.5



### **Connector & with Coupler Port Connector**

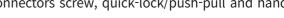
Features of 4.3-10 connectors are compact reduced size than 7/16 Din connector, and offers excellent electrical characteristics, and the best Low PIM performance among of RF connector series. Three different coupling mechanisms of the plug connectors screw, quick-lock/push-pull and handscrew types are mateable with all jack connectors.



	Parameter	Value		
Frequency Range		dc ~ 6GHz		
Impedance		50ohm(Nominal)		
Return Loss		< -36.6dB(VSWR 1.03) @4GHz < -32.2dB(VSWR 1.05) @6GHz		
Coupling Value (C	Coupler only)	-30.0~-50.0dB @3.5GHz (±1dB Freq. Point, B/W 100MHz)		
Insertion Loss		> -0.05 x √ f(GHz)		
Insulation resista	nce	> 5000MΩ		
Contact Resistance		Inner Contact ≤1.0mΩ		
CONTACT RESISTANC	.e	Outer Contact $\leq 1.5 m\Omega$		
Isolation		< -110dB min. @6GHz, screw type < -90dB min. @3GHz, Hand screw, Quick lock type < -70dB min. @3~ 6GHz, Hand screw, Quick lock type		
Input Power		500W @2GHz		
PIMD		< -166dBc(+43dBm/2tone) < -160dBc(+46dBm/2tone)		
Durability		500matings		
Temperature / Hu	imidity Range	-40°C ~ +85°C / 65°C, 80%		
Salt spray(5%)		720hrs		
Environment	Mating sealing	IP67		
Class	Inner sealing	IP67		



	Parameter	Value		
Frequency Range		dc ~ 6GHz		
Impedance		50ohm(Nominal)		
Return Loss		< -32.2dB(VSWR 1.05)		
Insertion Loss		> -0.05 x √ f(GHz)		
Insulation resistan	ce	> 5000MΩ		
	- ( O.h)	Inner Contact $\leq$ 1.0m $\Omega$		
Contact Resistance	e(mOnm)	Outer Contact $\leq 1.5 m\Omega$		
Isolation		< -90dB@1GHz		
Input Power		500W @2GHz		
PIMD		< -160dBc(+43dBm/2tone)		
Durability		500matings		
Temperature / Hur	nidity Range	-40°C ~ +85°C / 65°C, 80%		
Salt spray(5%)		720hrs		
Environment	Mating sealing	IP67		
Class	Inner sealing	Airleak 0.15bar 1Min.		
	•	Body : Bs(TIP)		
Material (Finish)		Inner : BeCu, Bs(Silver)		
		Insulator : PTFE		
		Gasket: Silicone rubber		



## 4.3/10 NEXT

Basically Telcon new 4.3-10 Advanced connector is upgrading interface version which prevent 4.3-10 jack connectors from accidently mating with 4.1-9.5 male connector. Moreover Telcon offers special features of mechanical spec with 500 mating durability, and environmental spec with salt spray testing with 720hrs guarantee. This small change make Telcon.



- Eliminating the risk of mating with 4.1/9.5 male connector
- Excellent coating technology
- IEC standard compatible

	Parameter	Value		
Frequency Range		Dc ~ 6GHz		
Impedance		50ohm(Nominal)		
Return Loss		< -36.6dB(VSWR 1.03) @4GHz < -32.2dB(VSWR 1.05) @6GHz		
Insertion Loss		> -0.05 x √ f(GHz)		
Insulation resistan	ice	> 5000MΩ		
		Inner Contact $\leq$ 1.0m $\Omega$		
Contact Resistance(mOhm)		Outer Contact $\leq 1.5 m\Omega$		
Isolation		<ul> <li>&lt; -110dB min. @6GHz, screw type</li> <li>&lt; -90dB min. @3GHz, Hand screw, Quick lock type</li> <li>&lt; -70dB min. @3~ 6GHz, Hand screw, Quick lock type</li> </ul>		
Input Power		500W @2GHz		
PIMD		< -166dBc(+43dBm/2tone) < -160dBc(+46dBm/2tone)		
Durability		100matings		
Temperature / Hur	midity Range	-40°C ~ +85°C / 65°C, 80%		
Salt spray(5%)		720hrs		
Environment Mating sealing		IP67		
Class Inner sealing		Air leak 0.15bar 1Min.		
		Body : Bs(TIP)		
Material (Finish)		Inner:BeCu, Bs(Silver)		
		Insulator : PTFE		
		Gasket: Silicone rubber		

# 7/16

### **Connector & with Coupler Port Connector**

Wireless mobile communication is one of the rapidly growing industries which requires high transmission power and low noise level technology. The 7/16 is a reference to the 7 mm inside diameter of the female inner contact and the corresponding 16 mm ID of the outer contact. It is designed in consideration of mechanical robustness, and has very stabilization construction. Telcon use 7/16 Din connector with widely application like outdoor jumper cable, RRH I/O port, and adaptors, and very proud of to be featured in high level plating technology in the name of TCP/ TIP enduring more than 720hours in harsh environment.



Parameter		Value		
Frequency Range		dc ~ 6GHz		
Impedance		50ohm(Nominal)		
Return Loss		< -23.1dB(VSWR 1.15)		
Coupling Value		-30.0~-50.0dB @3.5GHz (±1dB Freq. Point, B/W 100MHz)		
Insertion Loss		> -0.05 x √ f(GHz)		
Insulation resistant	ce	> 10,000MΩ		
Contact Posistance	(mOhm)	Inner Contact $\leq$ 0.4m $\Omega$		
Contact Resistance(mOhm)		Outer Contact $\leq 1.5 \text{m}\Omega$		
Isolation		< -90dB min. @3GHz		
Input Power		500W @2GHz		
PIMD		< -165dBc(+43dBm/2tone)		
Durability		500matings		
Temperature / Hun	nidity Range	-40°C ~ +85°C / 65°C, 80%		
Salt spray(5%)		720hrs		
Environment	Mating sealing	IP67		
Class Inner sealing		Airleak 0.15bar 1Min.		
		Body : Bs(TIP)		
		Inner : BeCu, Bs(Silver)		
Material (Finish)		Insulator : PTFE		
		Gasket: Silicone rubber		
		Chain : STS(PASSIVITY)		

### **Multi Port RF Connector**

## Memo

Telcon's Screw type multi RF Connector is designed to provide multiple RF ports within a single connector, and it provides the following advantages.



-Easy installation

-Cable-Saving design

-Very robust housing and coupling mechanism

-Stable RF performance – Passive Inter Modulation Distortion

Parameter	Value
Frequency Range	dc ~ 6GHz
Number of port	4 ports (Possible customize)
Impedance	50ohm(Nominal )
Return Loss	< -30.7dB(VSWR 1.06)
Insertion Loss	> -0.05 x √ f(GHz)
Insulation resistance	> 5000MΩ
Contact Resistance(mOhm)	Inner Contact $\leq$ 3.0m $\Omega$
	Outer Contact $\leq 2.5 m\Omega$
Isolation	< -90dB min. @3GHz
Input Power	300W @2GHz
PIMD	< -160dBc(+43dBm/2tone)
Durability	100matings
Temperature / Humidity Range	-40°C ~ +85°C / 65°C, 80%
Salt spray(5%)	720hrs
Environment Class(Mating sealing)	IP67
	Body : Bs, BeCu(TIP)
Material (Finish)	Inner : BeCu, Bs(Silver)
	Insulator : PTFE
	Gasket: Silicone rubber





#### **Company Products**





#### KOREA

684, Dongtangiheung-ro, Giheung-gu, Yongin-si, Gyeonggi-do, 17102, Republic of Korea **TEL** +82-31-371-8507~8519 **FAX** +82-31-371-8532

#### CHINA

38 South Tuanjie Road Hi-Tech Zone of Xian Xiancity Shaanxi Province P.R China **TEL** +86-029-6871-7865~67

#### VIETNAM

Dong Van 1 Industrial Zone, Bach Thuong commune, Duy Tien district, Ha Nam province, Viet Nam **TEL** +84-226-358-2355~6