

OSI MICROWAVE TECHNOLOGY

LOWER LOSS
SUPERIOR STABILITY

MICROWAVE TEST CABLE ASSEMBLIES
COAXIAL ADAPTERS SUPPORTING
FREQUENCIES UP TO 110GHz



WWW.OSINTER.COM



YOUR COMPREHENSIVE GUIDE
TO PRECISION-ENGINEERED
SOLUTIONS



PHASE MICRO
PHASE MICRO LITE
TEST CORE



THE OPTIMAL BALANCE OF
COST-EFFECTIVENESS, FLEXIBILITY,
AND ELECTRICAL INTEGRITY

COMPANY PROFILE

01. COMPANY OVERVIEW

OSI Co., Ltd. is a leading provider of high-frequency microwave RF solutions supporting up to 110 GHz and high-performance cable assemblies and connectors for various industries including telecommunications, semiconductor testing, aerospace, and defense.

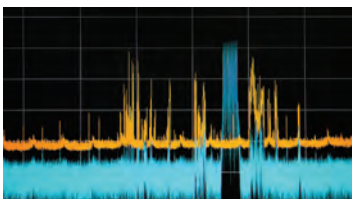
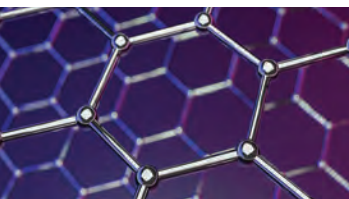
Since our establishment in 2011, we have built a reputation for delivering innovative, high-quality products that ensure superior performance and reliability.

We are proud to hold ISO 9001, ISO 14001, ISO 45001 certifications, and the 'Best Value' certification from Gyeonggi-do, South Korea.



02. KEY TECHNOLOGIES

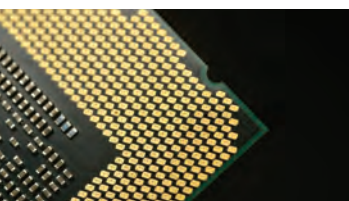
- End-to-End Manufacturing: From low-loss dielectric core design to finished product.
- Minimal Phase Delta Matching: Precision technology to ensure minimal phase variation across frequencies.
- Lowest Weight, Low-Loss Coaxial Cable: Utilizes advanced nanotechnology for superior performance in weight-sensitive applications.
- Advanced Impedance Matching: Optimized for high-frequency signal integrity and reduced reflections.



03. MARKET PRESENCE

Our products are widely used in high-demand environments such as military operations, high-frequency testing facilities, and advanced communication systems.

OSI serves a broad range of industries, including 5G and 6G telecommunications, aerospace, defense, high speed digital testing, and semiconductor testing applications.



04.
TECHNICAL
SALES FORCE

OSI boasts a highly skilled technical sales force that works closely with customers to develop the best solutions from concept to completion. Our team collaborates with clients to understand their unique needs and deliver tailored solutions that meet the most demanding technical requirements.



05.
FUTURE
GOALS

- **Product Innovation**
Development of the lowest weight coaxial cable for aerospace defense applications with nano technology and quantum computing applications.
- **Global Expansion**
Strengthening our market presence across key regions including the U.S., Europe, and Asia-Pacific.
- **Sustainability**
OSI is committed to ESG management, integrating environmental, social, and governance principles into our company culture and operations.



PHASE MICRO

PHASE MICRO Microwave Test Cable Assemblies: The Pinnacle of Precision and Reliability

For high-precision microwave testing up to 110GHz, OSI's PHASE MICRO series is the top choice.

KEY APPLICATIONS

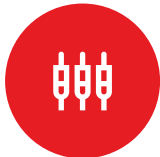
Thermal Vacuum Tests

Vital for aerospace, these assemblies endure extreme thermal conditions, mimicking space.



Phase Array Antenna Measurement

Crucial for wireless systems, these cables ensure precise gain measurements.



Shielded Chamber Tests

Essential for EMC/EMI tests, ensuring signal integrity and isolation.



VNA Measurement

Suited for VNA tests, offering accurate S-parameter measurements across frequencies.



ELECTRICAL PERFORMANCE METRICS

Insertion Loss

With minimal signal loss, these assemblies ensure accurate data, with an insertion loss down to -1.35 dB/meter (P35E20) at its peak frequency.

Amplitude Stability

Maintaining stability of +/- 0.05 dB at frequency of 40GHz, these assemblies preserve signal integrity during bending. Essential for high-precision amplitude measurements for VNA setups.

Phase Stability

Designed for minimal phase deviation during flexure and temperature changes, ensuring consistent measurements.

DURABILITY AND MECHANICAL RESILIENCE

Rugged design protects against mechanical stresses like crushing and kinking:

- Crush Resistance: Assemblies withstand up to 41.2 Kg-F/ cm.
- Temperature Range: Operates from -40°C to +150°C.



QUALITY ASSURANCE AND COMPLIANCE

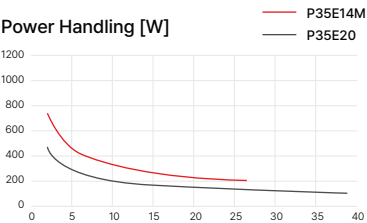
Each PHASE MICRO assembly undergoes rigorous testing:

- Time-Domain Reflectometry (TDR) Testing: Ensures minimal signal reflection and optimal impedance matching.
- Network Analyzer Verification: Full characterization of S-parameters up to the maximum operating frequency.



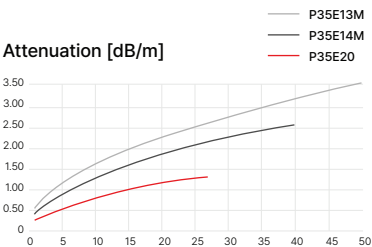
POWER HANDLING

The PHASE MICRO series is designed for exceptional power handling, ensuring signal integrity even in high-power RF tests.



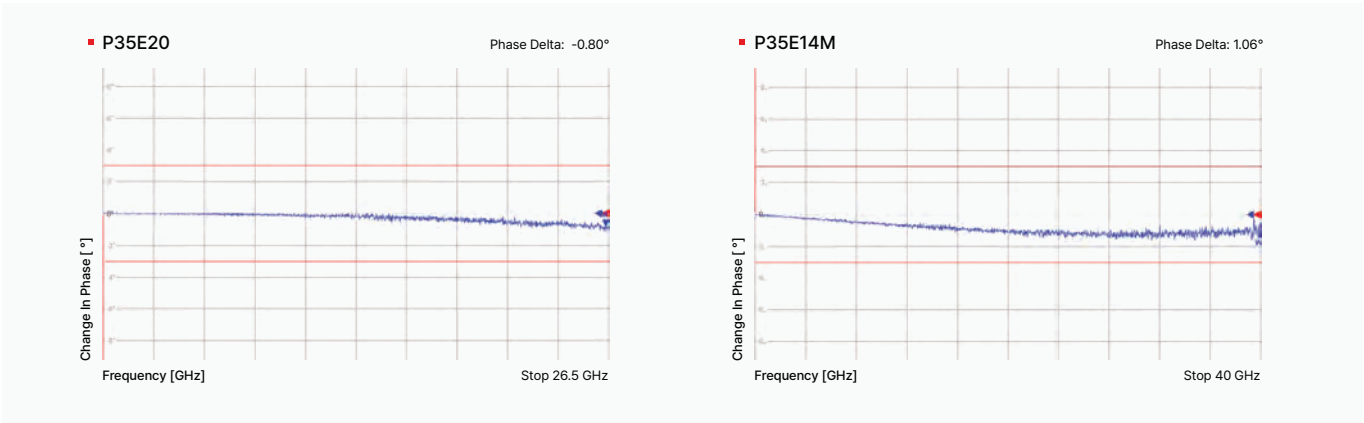
ATTENUATION

The PHASE MICRO series is designed for exceptional power handling, ensuring signal integrity even in high-power RF tests.



PHASE CHANGE VERSUS FLEXURE

The PHASE MICRO series showcases excellent phase stability, crucial for high-frequency tasks. With minimal phase change during flexure at the minimum bending radius, they're perfect for phase-critical uses like phase array antennas and VNA measurements.



Specifications	P35E13M	P35E14M	P35E20	P16E08	P23E10
Maximum Frequency	50GHz	43.5GHz	26.5GHz	110GHz	67.5GHz
Minimum Insertion Loss	-3.7dB / meter	-2.6dB / meter	-1.35dB / meter	- 14.7 dB / meter	-5.7dB / meter
VSWR (Typical)	1.30:1	1.30:1	1.25:1	1.4:1	1.3:1
Phase Stability VS Flexure	±4°	±3°	±3°	±15°	±8°
Insertion Loss Stability VS Flexure	± 0.08dB	± 0.05dB	±0.1dB	±0.25dB	±0.15dB
Minimum Bending Radius		25mm			20mm
Shielding Effectiveness (18GHz)			<-100dB		
Temperature Range (°C)		-40° ~ +150°		-40° ~ +85°	-40° ~ +150°
Crush Resistance (Kg-F/cm)			41.2		
Jacket Size		Ø9mm Stainless Steel Armor with PTFE Braids		Ø3.9mm Stainless Steel Armor with PTFE braids	Ø6.0mm Stainless Steel Armor with PTFE braids

* Contact technical sales for further information.

* Insertion loss can be estimated as 0.04 x Sqrt (GHz)dB per connector

PHASE MICRO

Navigating the PHASE MICRO Product Matrix:
Your Comprehensive Guide to Precision-Engineered Solutions

Connector Type (Male & Female)	P16E08	P23E10	P35E13M	P35E14M	P35E20M
1.0mm	Male Only				
1.85mm		✓			
2.4mm			✓	✓	
2.92mm				✓	
3.5mm					✓
N					✓

CABLE ASSEMBLY CONNECTOR DIMENSIONS

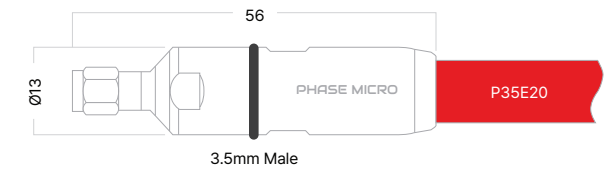
■ PHASE MICRO - P35E13M (2.4mm)



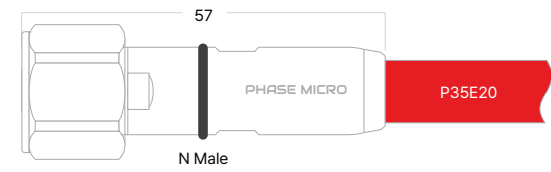
■ PHASE MICRO - P35E14M (2.92mm)



■ PHASE MICRO - P35E20 (3.5mm)



■ PHASE MICRO - P35E20 (N Type)



* Contact technical sales for further information.

CUSTOMIZATION AND ADAPTABILITY

Recognizing each test's uniqueness, the PHASE MICRO series provides customization:

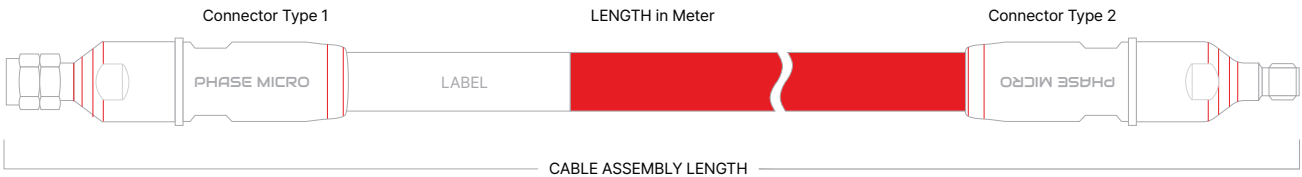
- Cable Length: Adjustable up to 20 meters with precise length tolerance.
- Connector Flexibility: From N-type to precision connectors like 3.5mm, 2.92mm, 2.4mm, 1.85mm, and 1.0mm users can easily adapt to their testing needs.

CABLE ASSEMBLY PART NUMBER MAP

	Frequency	Part Number	Interface Description
PHASE MICRO	50GHz	P35E13M-2M2M-Length	2.4mm Male to 2.4mm Male
		P35E13M-2M2F-Length	2.4mm Male to 2.4mm Female
		P35E13M-2F2F-Length	2.4mm Female to 2.4mm Female
		P35E14M-2MKM-Length	2.4mm Male to 2.92mm Male
		P35E14M-2MKF-Length	2.4mm Male to 2.92mm Female
		P35E14M-2FKM-Length	2.4mm Female to 2.92mm Male
	40GHz	P35E14M-2FKF-Length	2.4mm Female to 2.92mm Female
		P35E14M-KMKM-Length	2.92mm Male to 2.92mm Male
		P35E14M-KMKF-Length	2.92mm Male to 2.92mm Female
		P35E14M-KFKF-Length	2.92mm Female to 2.92mm Female
	26.5GHz	P35E20-3M3M-Length	3.5mm Male to 3.5mm Male
		P35E20-NMNM-Length	N Male to N Male
		P35E20-3MNM-Length	3.5mm Male to N Male

HOW TO DEFINE PART NUMBER TO BUILD YOUR PHASE MICRO?

1. Determine the cable type based on your testing frequency requirements.
2. Pick the connector type and gender for each end.
3. Indicate the desired length in meters.



▪ Example

P35

E14M

- 2M

- KF

- 1.0M

Cable Type

Connector Type 1

Connector Type 2

Length

➔

40GHz PHASE MICRO Test Cable Assembly with 2.4mm Male to 2.92mm Female in 1.0 meter Long

* Contact technical sales for further information.

PHASE MICRO LITE

PHASE MICRO Lite Test Cable Assemblies: The Optimal Balance of Cost-Effectiveness, Flexibility, and Electrical Integrity

In today's rapid testing environments, an economical, high-performing solution is vital. The PHASE MICRO Lite test cable assemblies offer cost-effectiveness, electrical excellence, and flexibility. This series delivers a budget- friendly, robust solution for various applications.

KEY APPLICATIONS

- **Budget-Friendly Excellence**

The PHASE MICRO Lite series offers top-tier performance at an affordable price, perfect for budget-limited projects.



- **Superior Flexibility**

Its minimal armored design ensures exceptional flexibility, simplifying cable handling in intricate setups.



- **Phase Stability**

With up to $\pm 3^\circ$ phase stability, it guarantees consistent measurements across varied conditions.



- **Insertion Loss Stability**

Boasts an insertion loss stability below -0.1dB , ensuring signal efficiency.



- **Temperature Range**

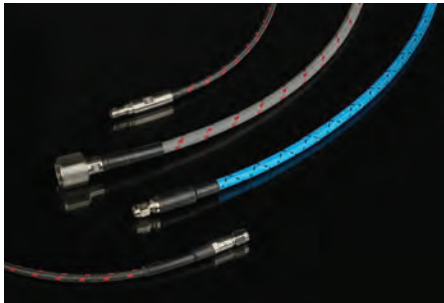
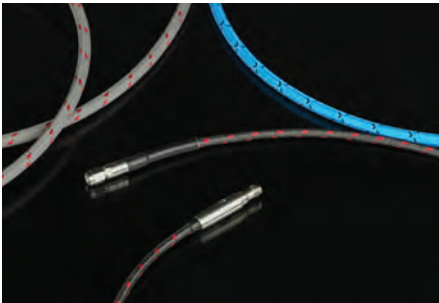
Functions effectively from -40° to $+100^\circ\text{C}$, suitable for diverse test environments.



IN-DEPTH APPLICATIONS

The PHASE MICRO Lite series excels in:

- **Insertion Loss** With top-notch phase and insertion loss stability, it's ideal for precise VNA (Vector Network Analyzer) test.
- **RF System Setups** Perfect for RF system projects, especially with complex cable paths and regular adjustments.
- **Production Test Settings** Balancing cost and performance, it's optimal for high-volume manufacturing tests.
- **Thermal & Environmental Tests** Its broad temperature adaptability fits thermal and environmental test conditions.

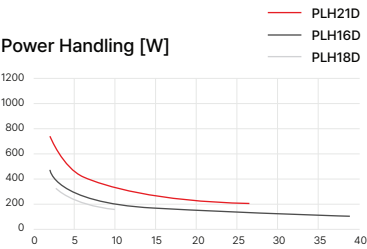


QUALITY ASSURANCE

Every PHASE MICRO Lite test cable assembly is stringently tested to uphold industry norms. They're fully ROHS compliant and backed by a warranty, ensuring quality assurance.

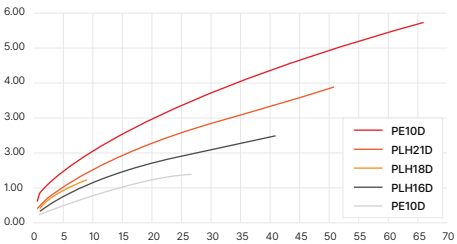
POWER HANDLING

The PHASE MICRO Lite series is designed for efficient power management across diverse testing scenarios



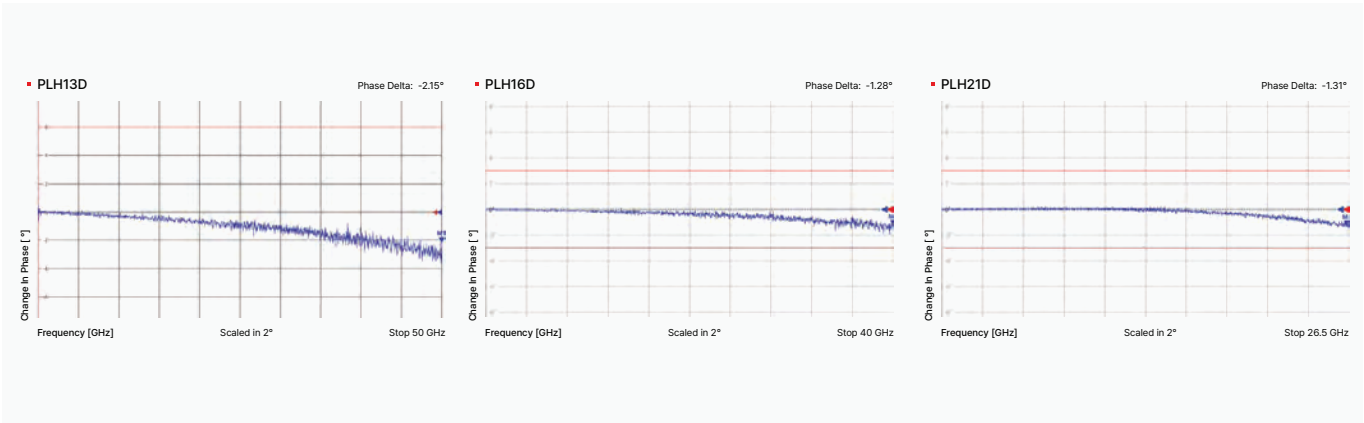
ATTENUATION

A key feature of the PHASE MICRO Lite series is its minimal attenuation.



PHASE CHANGE VERSUS FLEXURE

The PHASE MICRO Lite series balances flexibility with phase stability, boasting a phase stability versus flexure of $\pm 5^\circ$. So, even with bending or adjustments, the signal's phase stays consistent, guaranteeing precise and consistent measurements.



Specifications	PLH13D	PLH16D	PLH21D	PLH18D
Maximum Frequency	50GHz	40GHz	26.5GHz	8.5GHz
Minimum Insertion Loss	-3.8dB / meter	-2.9dB / meter	-1.7dB / meter	- 0.9 dB / meter
VSWR (Typical)	1.35:1	1.25:1	1.25:1	1.25:1
Phase Stability VS Flexure	$\pm 5^\circ$	$\pm 4^\circ$	$\pm 2^\circ$	$\pm 2^\circ$
Insertion Loss Stability VS Flexure	± 0.2 dB	± 0.1 dB	± 0.1 dB	± 0.1 dB
Minimum Bending Radius	20mm	30mm	35mm	30mm
Maximum Bending Radius	50GHz	40GHz	26.5GHz	8.5GHz
Shielding Effectiveness (18GHz)	< -90dB			
Temperature Range (°C)	-40° ~ +85° *High Temperature Options are available.			

* Contact technical sales for further information.
* Insertion loss can be estimated as 0.04 x Sqrt (GHz)dB per connector

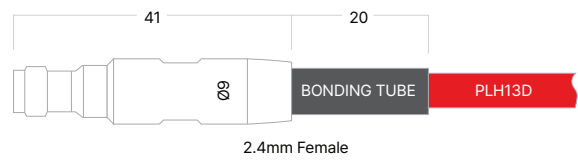
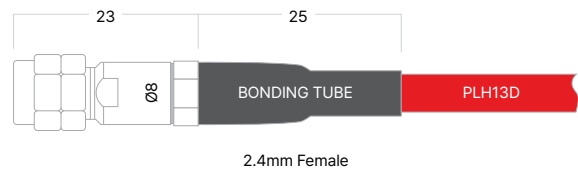
PHASE MICRO LITE

Understanding the PHASE MICRO Lite Product Matrix Table: A Technical Overview

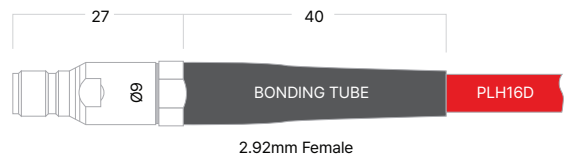
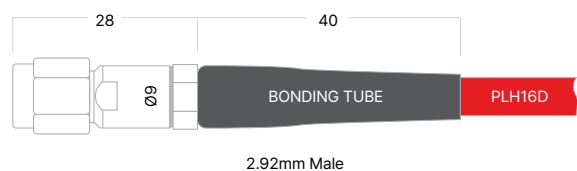
Connector Type (Male & Female)	PLH13D (DC~50GHz)	PLH16D (DC~40GHz)	PLH21D (DC~26.5GHz)	PLH18D (DC~8.5GHz)
1.85mm	✓		Female Only	
2.4mm	✓	✓		
2.92mm		✓	Male Only	
3.5mm			✓	
TNCA			Male Only	
SMA		✓	✓	✓
SMA Male R/A			Male Only	Male Only
N Type			✓	✓
N Male R/A			Male Only	Male Only

CABLE ASSEMBLY CONNECTOR DIMENSIONS

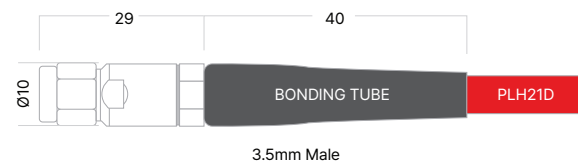
■ PHASE MICRO LITE - PLH13D (2.4mm)



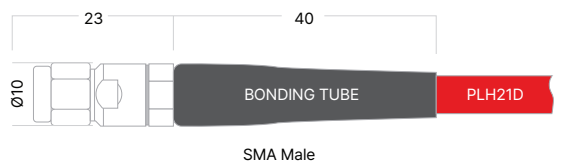
■ PHASE MICRO LITE - PLH16D (2.92mm)



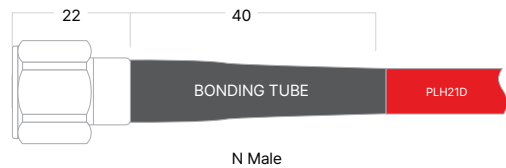
■ PHASE MICRO LITE - PLH21D (3.5mm)



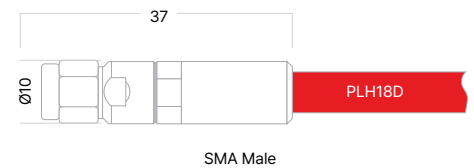
■ PHASE MICRO LITE PLH21D (SMA)



■ PHASE MICRO LITE PLH21D (N)



■ PHASE MICRO LITE - PLH18D (SMA)



* Contact technical sales for further information.

CUSTOMIZATION AND ADAPTABILITY

Understanding that every testing scenario is unique, the PHASE MICRO Lite series offers customization options:

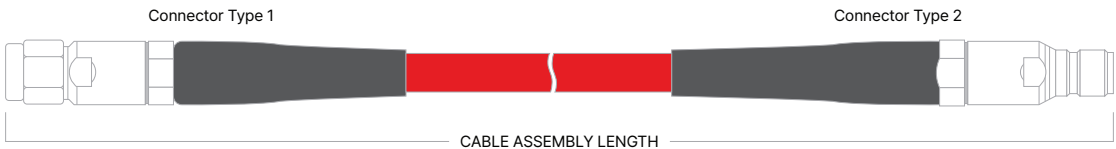
- Cable Length: Customizable up to 20 meters with tighter length tolerance.
- Connector Flexibility: From N-type to precision connectors like 3.5mm, 2.92mm, 2.4mm, and 1.85mm, the table below details the options available for tailored testing needs.

CABLE ASSEMBLY PART NUMBER MAP

	Frequency	Part Number	Interface Description
PHASE MICRO	50GHz	PLH13D-2M2M-Length	2.4mm Male to 2.4mm Male
		PLH13D-2M2F-Length	2.4mm Male to 2.4mm Female
		PLH13D-2F2F-Length	2.4mm Female to 2.4mm Female
	40GHz	PLH16D-2MKM-Length	2.4mm Male to 2.92mm Male
		PLH16D-2MKF-Length	2.4mm Male to 2.92mm Female
		PLH16D-2FKM-Length	2.4mm Female to 2.92mm Male
		PLH16D-2FKF-Length	2.4mm Female to 2.92mm Female
		PLH16D-KMKM-Length	2.92mm Male to 2.92mm Male
		PLH16D-KMKF-Length	2.92mm Male to 2.92mm Female
		PLH16D-KFKF-Length	2.92mm Female to 2.92mm Female
	26.5GHz	PLH21D-SMSM-Length	SMA Male to SMA Male
		PLH21D-SMSF-Length	SMA Male to SMA Female
		PLH21D-SFSF-Length	SMA Female to SMA Female
	18GHz	PLH21D-NMNM-Length	N Male to N Male
		PLH21D-NMNF-Length	N Male to N Female
		PLH21D-SMNM-Length	SMA Male to N Male
		PLH21D-SFNF-Length	SMA Female to N Female
	8.5GHz	PLH18D-SMSM-Length	SMA Male to SMA Male
		PLH18D-SMSF-Length	SMA Male to SMA Female
		PLH18D-SFSF-Length	SMA Female to SMA Female
		PLH18D-NMNM-Length	N Male to N Male
		PLH18D-SMNM-Length	SMA Male to N Male
		PLH18D-SMNF-Length	SMA Male to N Female

HOW TO DEFINE PART NUMBER TO BUILD YOUR PHASE MICRO LITE CABLE ASSEMBLY?

1. Determine the cable type based on your testing frequency requirements.
2. Pick the connector type and gender for each end.
3. Indicate the desired length in meters.



▪ Example

PLH16D - KM - 2F - 2.0M

Cable Type Connector Type 1 Connector Type 2 Length



40GHz PHASE MICRO Lite Test Cable Assembly with 2.92mm Male to 2.4mm Female in 2.0 meter Long

* Contact technical sales for further information.

TEST CORE

TEST CORE: The Epitome of High- Precision Microwave DC~67GHz Interconnections in Space- Constrained Environments

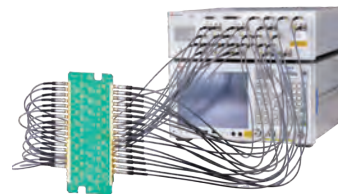
In the realm of space constrained microwave testing and measurement, TEST CORE cable assemblies reign supreme. Precision-engineered for scenarios with limited space yet uncompromising on outstanding electrical performance, they address the specific demands of such applications.

UNPARALLELED ELECTRICAL PERFORMANCE IN COMPACT SETTINGS

TEST CORE cable assemblies, products of extensive R&D, excel in these essential electrical metrics:

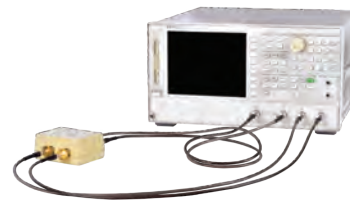
- **Insertion Loss**

Achieving as low as -5.7dB/m for the E10 series up to 67GHz and -1.1dB/m for the LH14 up to 8.5GHz series, TEST CORE maintains signal integrity in challenging scenarios.



- **Phase Stability**

Offering flexure phase stability of $\pm 8^\circ$ at 67GHz and $\pm 3^\circ$ at 40GHz, TEST CORE ensures consistent, precise measurements.



- **Temperature Adaptability**

Operating from -40°C to +125°C, these assemblies are adaptable to diverse environments, from intense cold to searing heat.



WHERE TEST CORE OUTSHINES

- **Semiconductor Testing** In semiconductor processes with almost no room for error, TEST CORE ensures dependable precision.
- **Phase Array Radar Systems** For system demanding precise control, TEST CORE is the industry's top pick
- **VNA Measurements** For the utmost in multi ports network accuracy, TEST CORE stands unmatched.
- **Compact RF Integration** Its broad temperature adaptability fits thermal and environmental test conditions.



COMPREHENSIVE QUALITY ASSURANCE: OUR COMMITMENT TO EXCELLENCE

Each TEST CORE assembly faces rigorous testing within our comprehensive quality program.

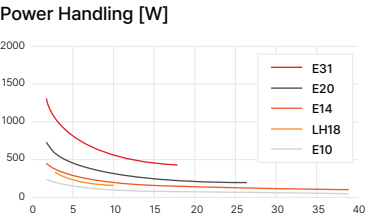
Unveiling TEST CORE: The Gold Standard in High-Performance Microwave Interconnections

For semiconductor testing, radar systems, or tight-space applications, TEST CORE cable assemblies are unmatched. Precision-engineered and quality-tested, they offer low attenuation, strong power handling, and consistent phase stability.

POWER HANDLING

Power Versatility

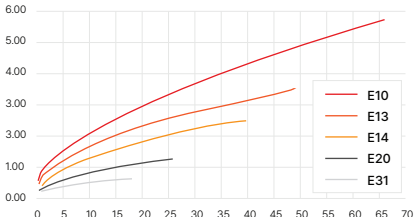
TEST CORE assemblies are designed for various power levels, suitable for both low and high-power applications.



ATTENUATION

Minimal Signal Loss

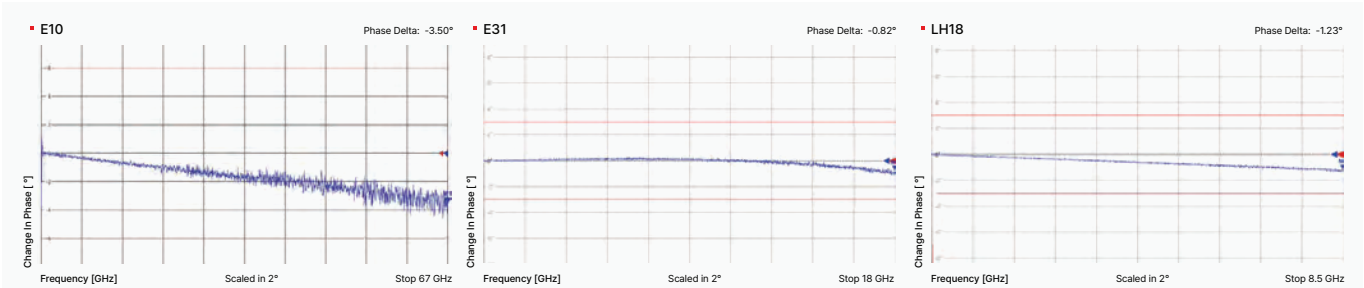
TEST CORE assemblies minimize signal degradation.



PHASE CHANGE AND STABILITY

Phase Stability

TEST CORE assemblies excel in phase stability, with $\pm 6^\circ$ for the E10 and $\pm 3^\circ$ for the E14 series. They ensure consistent performance under stress, vital for applications needing accurate phase readings.



TEST CORE cable assemblies excel in applications like semiconductor testing, phase array radar systems, and VNA measurements. With top electrical metrics, they're ideal for tight spaces and stringent stability needs.

Specifications	E10	E13	E14	E20	E31	LH18	LH14
Maximum Frequency	67.5GHz	50GHz	43.5GHz	26.5GHz	18GHz	8.5GHz	8.5GHz
Minimum Insertion Loss	-5.7dB / meter	-3.4dB / meter	-2.6dB / meter	- 1.4dB / meter	-0.65dB / meter	-1.1dB / meter	-1.3dB / meter
VSWR (Typical)	1.35:1	1.30:1	1.25:1	1.25:1	1.25:1	1.25:1	1.25:1
Phase Stability VS Flexure	$\pm 8^\circ$	$\pm 5^\circ$	$\pm 3^\circ$	$\pm 3^\circ$	$\pm 2^\circ$	$\pm 3^\circ$	$\pm 3^\circ$
Velocity of Propagation	80%	83%	83%	83%	83%	77%	77%
Insertion Loss Stability VS Flexure	± 0.3 dB	± 0.2 dB	± 0.2 dB	± 0.2 dB	± 0.1 dB	± 0.2 dB	± 0.2 dB
Minimum Bending Radius	25mm	32mm	36mm	48mm	81mm	45mm	36mm
Jacket Size	FEP Ø2.4	FEP Ø3.2	FEP Ø3.8	FEP Ø4.8	FEP Ø8.0	TPU Ø5.9	TPU Ø4.9
Shielding Effectiveness(18GHz)	< -90dB						
Temperature Range (°C)	-40° ~ +125°				-40° ~ +85°		

* Contact technical sales for further information.
* Insertion loss can be estimated as 0.04 x Sqrt (GHz)dB per connector

TEST CORE

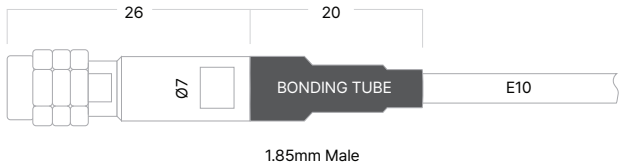
TEST CORE Product Matrix: Your Comprehensive Guide to High- Performance Microwave Interconnections

This guide helps you easily find the TEST CORE cable assembly that fits your needs.

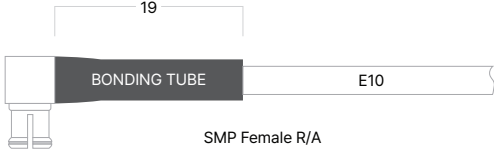
Connector Type (Male & Female)	E10	E13M	E14	E20	E31	LH31	LH18	LH14
1.85mm	✓		✓					
2.4mm		✓	✓					
2.92mm			✓					
3.5mm				✓				
SMP	✓							
SMPM	✓							
SMA	✓			✓	✓	Male Only	✓	Male Only
SMA Male R/A							Male Only	
N				Male Only	Male Only	Male Only	✓	
N Male R/A							Male Only	
SMBL								✓

CABLE ASSEMBLY CONNECTOR DIMENSIONS

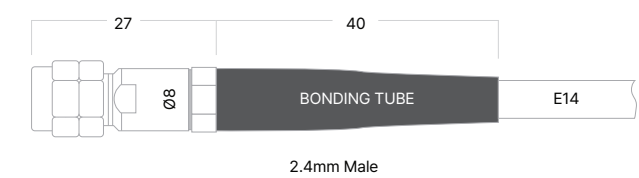
▪ TEST CORE E10 1.85mm



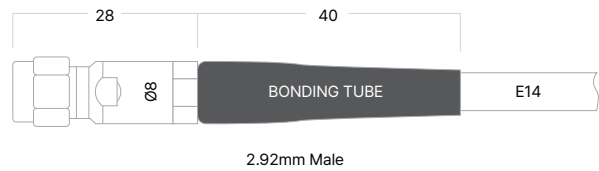
▪ TEST CORE E10 SMP FEMALE RIGHT ANGLE



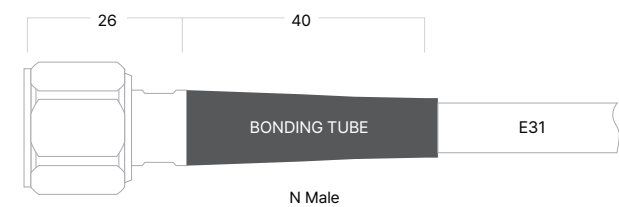
▪ TEST CORE E14 2.4mm



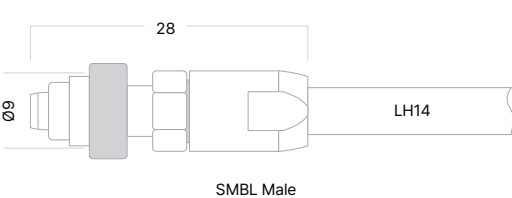
▪ TEST CORE E14 2.92mm



▪ TEST CORE E31 N



▪ TEST CORE LH14 SMBL



* Contact technical sales for further information.

COMPREHENSIVE QUALITY ASSURANCE: OUR COMMITMENT TO EXCELLENCE

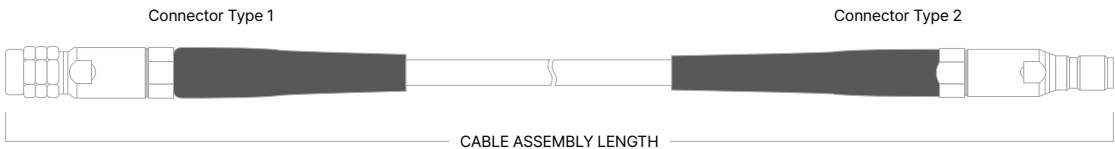
Every TEST CORE cable assembly undergoes a stringent series of tests as part of our exhaustive quality assurance program. This is further backed by a robust warranty policy, underscoring our unwavering commitment to quality and performance.

CABLE ASSEMBLY PART NUMBER MAP

	Frequency	Part Number	Interface Description
TEST CORE	67GHz	TCE10-VMVF-Length	2.4mm Male to 2.4mm Male
		TCE10-3MSPFFEL-Length	2.4mm Male to 2.4mm Female
	18GHz	TCE10-SPFRSM-Length	3.5mm Male to SMPM Male
		TCE10-SMSM-Length	SMA Male to SMA Male
	50GHz	TCLH13-2M2F-Length	2.4mm Male to 2.4mm Female
	40GHz	TCE14-2M2F-Length	2.4mm Male to 2.4mm Female
		TCE14-KMKF-Length	2.92mm Male to 2.92mm Female
	26.5GHz	TCE20-3M3F-Length	3.5mm Male to 3.5mm Female
		TCE20-NMNF-Length	N Male to N Female
	18GHz	TCE31-SMSF-Length	SMA Male to SMA Female
		TCE31-SNMN-Length	SMA Male to N Male
	8.5GHz	TCLH18-SMSF-Length	SMA Male to SMA Female
		TCLH18-NMNF-Length	N Male to N Female
		TCLH18-SMRNMR-Length	SMA Male R/A to N Male R/A
	6.0GHz	TCLH14-SMSM-Length	SMA Male to SMA Male
		TCLH14-SBMSBF-Length	SMBL Male to SMBL Female

HOW TO DEFINE PART NUMBER TO BUILD YOUR TEST CORE CABLE ASSEMBLY?

- 1. Begin with the prefix 'TC'
- 2. Determine the cable type based on your testing frequency requirements.
- 3. Pick the connector type and gender for each end.
- 4. Indicate the desired length in meters.



Example

TCE14 - VM - 2F - 1.0M

Cable Type Connector Type 1 Connector Type 2 Length



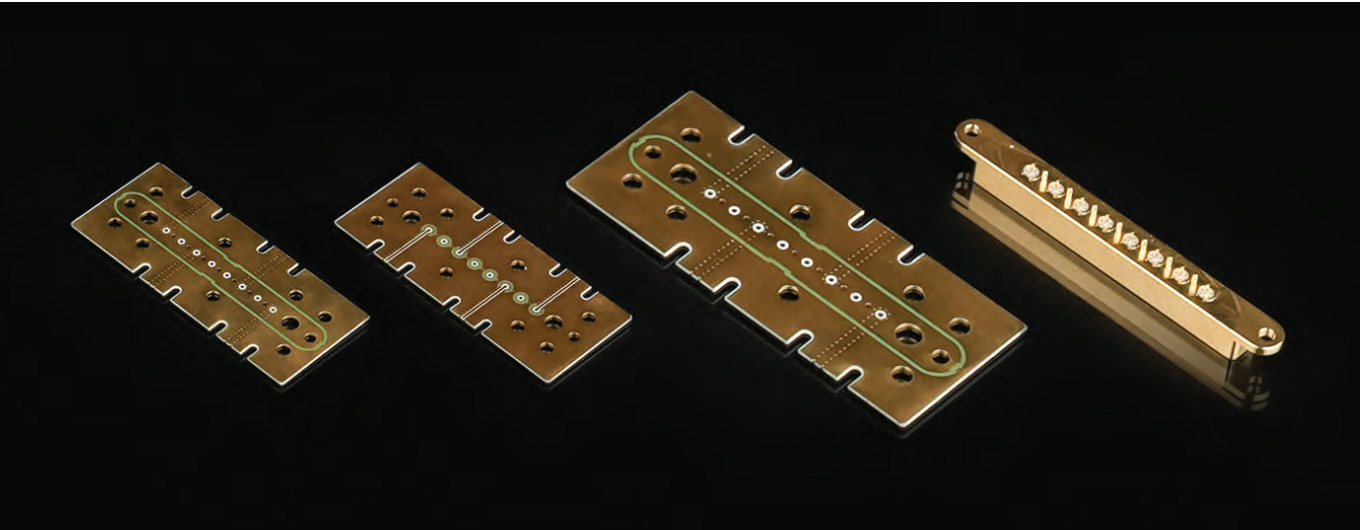
40GHz TEST CORE Cable Assembly with 1.85mm Male to 2.4mm Female in 1.0 meter Long

* Contact technical sales for further information.

ARRAY TEST

Array Test Assemblies: The ultimate Solution for On-Board Precision Testing

For applications requiring high-performance on-board testing with tight space constraints, OSI's Array Test series provides an ideal solution with exceptional precision and reliability.

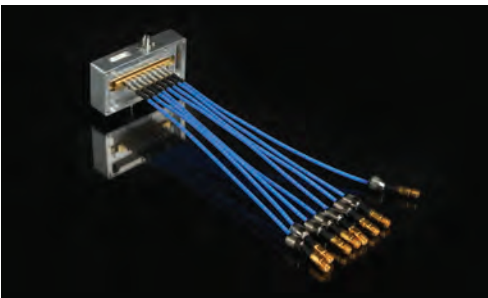


KEY APPLICATIONS

- On-Board Testing** Perfect for on-board RF testing, integrating SMP and SMPM male connections directly with the customer's RF PCB. This integration ensures lower VSWR, at the highest frequencies.
- Semiconductor Testing** Tailored for high-precision measurements in semiconductor testing environments, where accuracy and space efficiency are paramount.
- Precision Measurement** Ideal for precise RF measurements in high-density environments, where space-saving solutions are critical.

ELECTRICAL AND ENVIRONMENTAL PERFORMANCE METRICS

- Low Insertion Loss**
Ensures accurate data transmission, with minimal signal degradation across the frequency range.
- Phase Stability**
Maintains consistent phase performance during bending and temperature fluctuations, ensuring reliable results for critical applications.
- Temperature Resilience**
Operates effectively across a wide temperature range, from -40°C to +125°C, ensuring performance in extreme conditions.



QUALITY ASSURANCE AND COMPLIANCE

- Low Insertion Loss**
Ensures accurate data transmission, with minimal signal degradation across the frequency range.
- Phase Stability**
Maintains consistent phase performance during bending and temperature fluctuations, ensuring reliable results for critical applications.

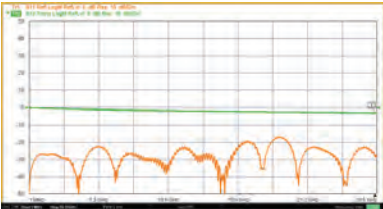


Electrical Performance of Array Test: A Deep Dive into Lower Loss and stability

These assemblies are designed to meet the rigorous demands of industries such as high speed semiconductor testing and defense system.

S PARAMETER PLOT

The Array Test series boasts lower loss, preserving signal quality across its frequency range.



Specifications 200mm Cable Assembly	
Impedance	50 ohm
Frequency Range	DC ~ 26.5GHz
Return Loss	1.3:1 Max
Insertion Loss	- 1.8 dB Min
Velocity of Propagation	80%
Nominal Outer Diameter of Cable	2.3mm
Minimum Bending Radius Static	20mm
Temperature Range	from -40° to +125°
Interface	SMMP to SMA

TECHNICAL HIGHLIGHTS

▪ SMP and SMMP Interfaces

Covering frequencies up to 26.5 GHz, these interfaces provide stable, high-quality connections with low signal loss.

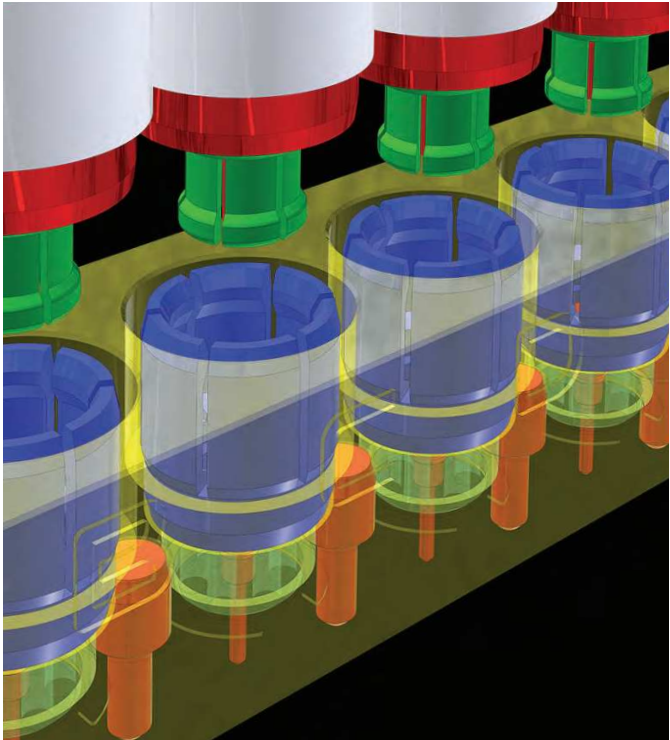
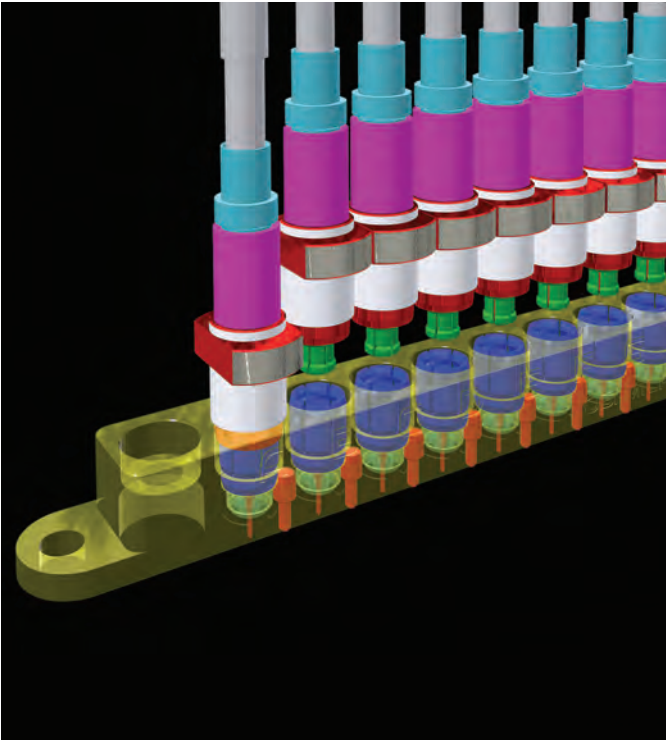
▪ Push and Pull Locking System

The SMMP interface offers a robust push-and-pull locking mechanism, allowing for easy attachment and detachment of individual channels, enhancing system flexibility.

▪ Compact Design

Engineered to fit within extremely tight spaces on PCBs, making them ideal for high-density layouts where space is a premium.

Electrical Specifications On Board Socket Assembly	
Impedance	50 ohm
Frequency Range	DC ~ 26.5GHz
Return Loss	1.5:1 Max
Channel Pitch	4.7mm Minimum
Force to Engage	6N
Durability (Mating)	500 cycles Min.
Temperature Range	from -40° to +125°
Interface	SMMP or SMP



* Contact technical sales for further information.

COAXIAL ADAPTERS

MICROWAVE TEST COAXIAL ADAPTERS

OSI's Microwave Test Coaxial Adapters are precision-engineered for optimal microwave testing. Bridging different connector types, they guarantee seamless signal transmission in demanding environments. With OSI's commitment to performance and durability, these adapters ensure accurate and consistent measurements, making them the industry's gold standard.

Interface type and Gender / Frequency	Max VSWR Male	1.85mm Male	1.85mm Female	2.4mm Female	2.4mm Female	2.92mm Male
DC-67GHz	1.30	VM	VF			
DC-50GHz	1.25	VM	VF	2M	2F	
DC-40GHz	1.25	VM	VF	2M	2F	KM
DC-26.5GHz	1.25					
DC-18GHz	1.25					

ADVANTAGES OF OSI'S MICROWAVE TEST COAXIAL ADAPTERS

- **Enhanced Signal Integrity**
 - **Versatile Compatibility**
 - **Durable Construction**
- Minimized reflection and loss, ensuring optimal signal transmission across various frequencies.

Designed to interface with a wide range of connectors, facilitating seamless integration in diverse setups.

Built with high-quality materials, these adapters withstand rigorous testing conditions, ensuring longevity and consistent performance.



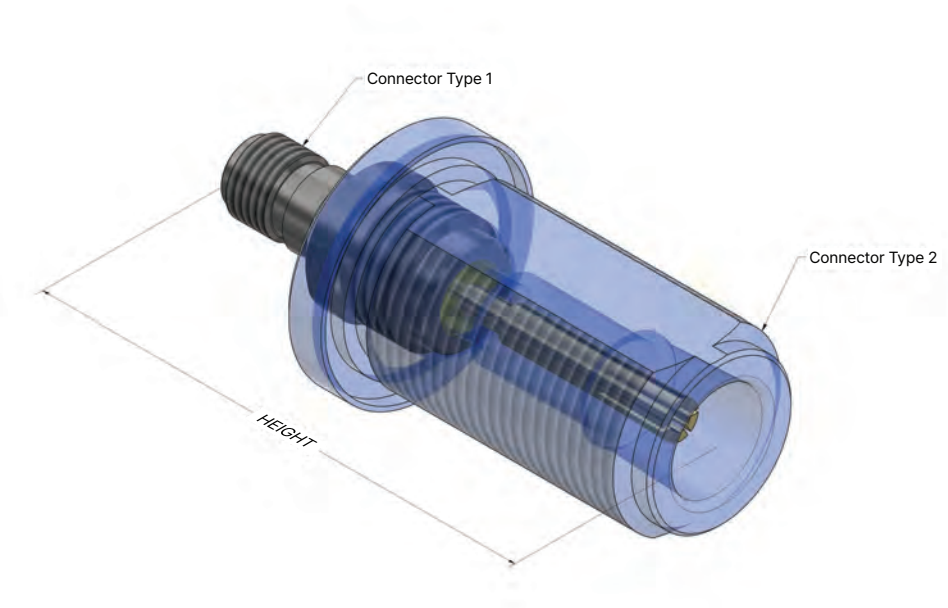
YOUR GUARANTEED QUALITY

All Coaxial Adapters are manufactured and fully tested in the quality program. OSI offers a warranty program within range of warranty policy for guaranteed quality. ROHS compliant.

2.92mm Female	3.5mm Male	3.5mm Female	SMA Male	SMA Female	N Male	N Female
KF						
	3M	3F	SM	SF		
	3M	3F	SM	SF	NM	NF

HOW TO BUILD YOUR OSI’S MICROWAVE COAXIAL TEST ADAPTER?

- 1. Start designate with Adapter as ‘ADP’
- 2. Select test frequency range.
- 3. Choose connector type with gender for both ends.



▪ Example

ADP - 2F - KM
Connector Type 1 Connector Type 2



40GHz Adapter with 2.4mm Female to 2.92mm Male.

* Contact technical sales for further information.



CONTACT INFORMATION

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Lower Loss, Superior Stability
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