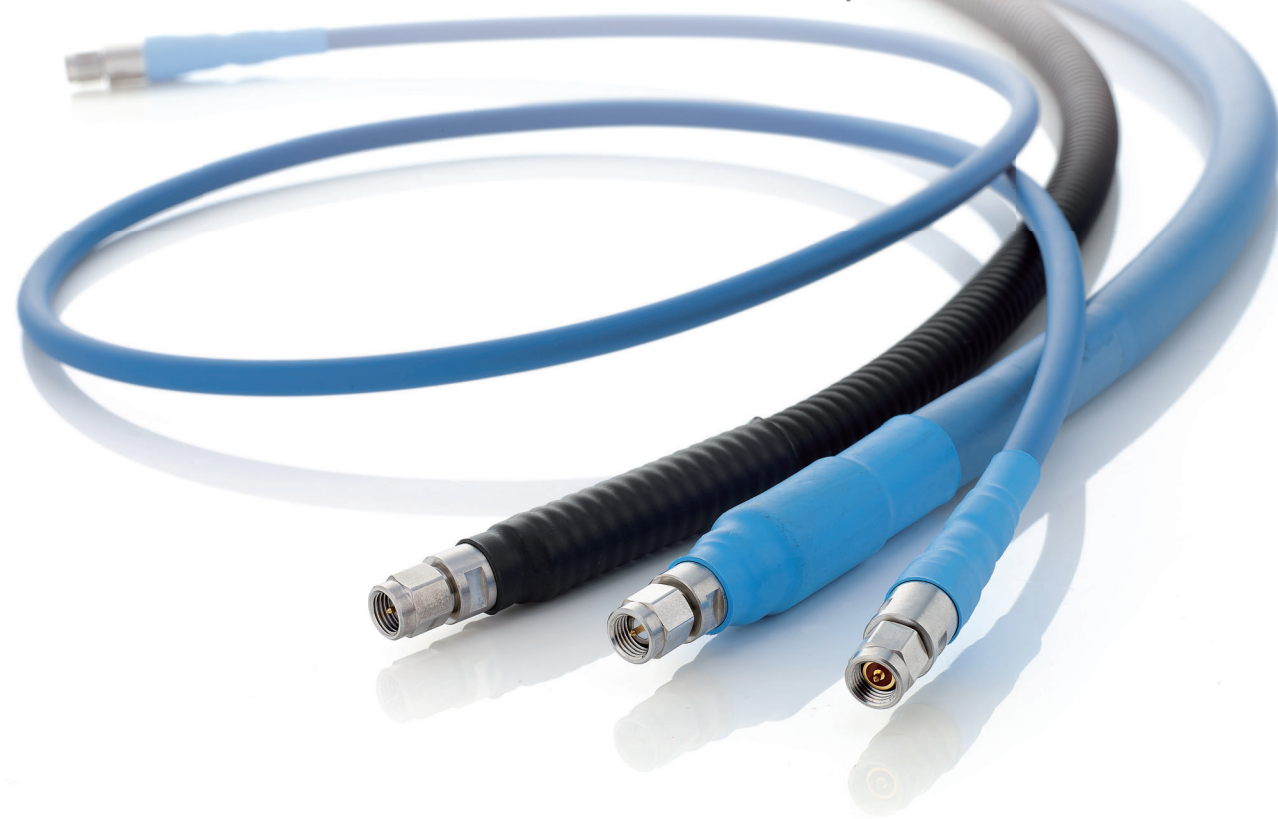


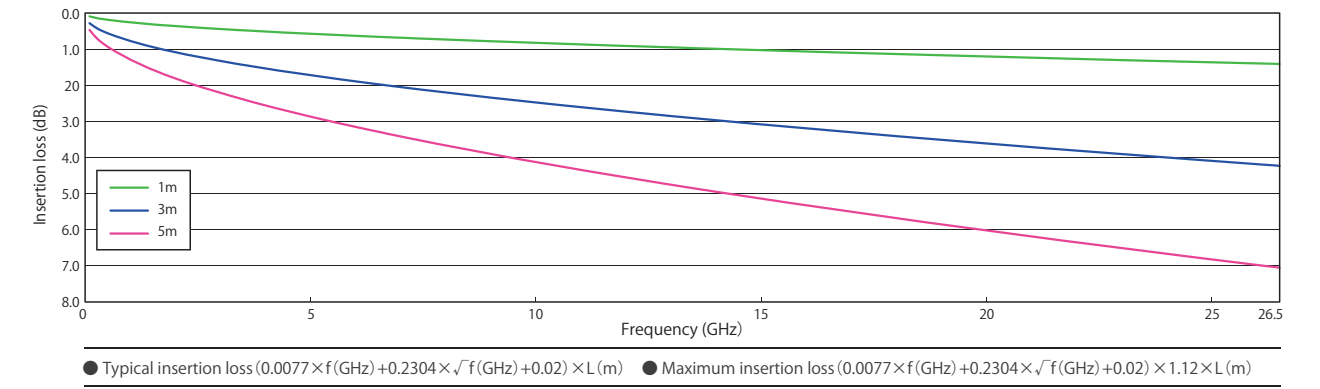
# 221

- Static bending
- Flexibility
- Frequency 26.5 GHz
- Temperature range -30~+85°C
- Minimum bending radius 20~30 mm
- RoHS compliant
- Measurement
- Armored
- Lightweight Armored (for fixed wiring)
- Delivery time 5 days
- Listed in the catalogue manufactured to order
- Custom support

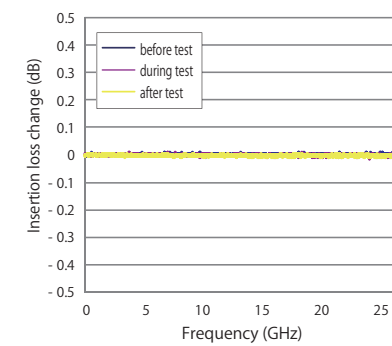


## Technical Data

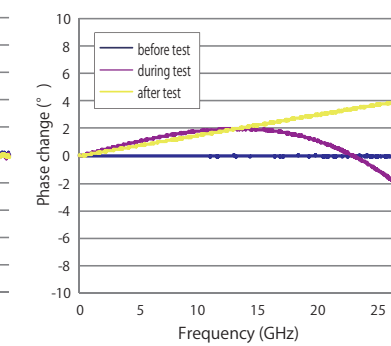
Cable typical insertion loss



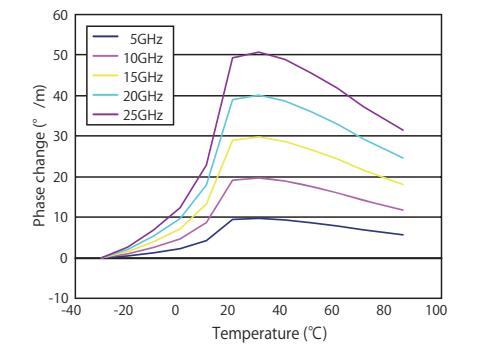
Static bending data (insertion loss, phase)



Bending radius: 30 mm



Phase change vs. temperature



\*The cable was wrapped 360° around φ60mm mandrel.

\*The cable was measured in chamber every 20 °C from -40 to 90 °C, 1 hour after the temperature changed.

## Property

### Electrical properties

Maximum operating frequency	26.5 GHz z
Characteristic impedance	50±1 Ω
Capacitance (typ.)	88 pF/m
Propagation delay (typ.)	4.4 ns/m
Velocity of Propagation (typ.)	76 %
Higher mode frequency (typ.)	27.5 GHz
VSWR (per connector/both ends of assy.)	1.153/1.33
Maximum frequency insertion loss (26.5 GHz)	1.4 dB/m

### Mechanical properties

	Standard type	Armored type	Lightweight Armored type (for fixed wiring)
Cable outer diameter	6.0 mm	12.5 mm	11 mm
Minimum bending radius (inner side)	20 mm	20 mm	30 mm
Cable mass (typ.)	64 g/m	212 g/m	160 g/m
Continuous operating temperature range	-30~+85 °C	-30~+85 °C	-30~+85 °C
Armored side pressure	—	196N/cm	196N/cm
Assembly length	200~5,000 mm	700~5,000 mm	500~5,000 mm

### Order form example

Please provide the following information when placing an order.

\* See P.45\*Connector combination codes\*

#### Example 1 221

Assembly length: 1000mm  
Connector I : SMA (m) straight  
Connector II : 3.5mm (m) straight

Catalog No.  
MWX221-01000AMS DMS

a b c

#### Example 2 221 Armored type

Assembly length: 1500mm  
Connector I : N (m) straight  
Connector II : N (m) straight

Catalog No.  
MWX221-01500NMS NMS/B

a b c d

#### Example 3 221 Lightweight Armored type

Assembly length: 1000mm  
Connector I : SMA (m) straight  
Connector II : SMA (m) straight

Catalog No.  
MWX221-01000AMSAMS/A

a b c d

a: Cable b: Assembly length c: Connector d: Armored

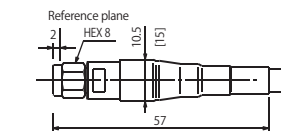
We have the capacity to deliver products with matched phases for customers who require this characteristic.

Option

## Connector

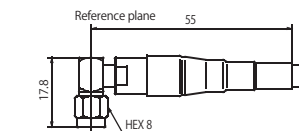
### SMA (m) straight (Code: AMS)

Maximum operating frequency: 18.5GHz z / Mass:10g



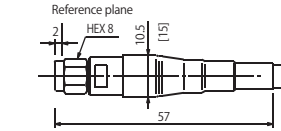
### SMA (m) right Angle (Code: AMH)

Maximum operating frequency: 18.0GHz z / Mass:10g



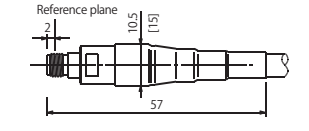
### 3.5mm (m) straight (Code: DMS)

Maximum operating frequency: 26.5GHz z / Mass:11g



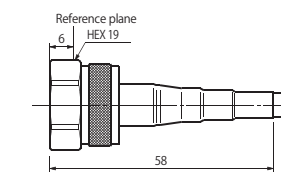
### 3.5mm (f) straight (Code: DFS)

Maximum operating frequency: 26.5 GHz z / Mass:10g



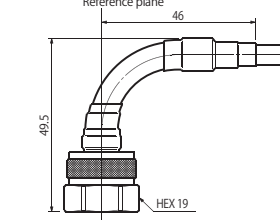
### N (m) straight (Code: NMS)

Maximum operating frequency: 18.0GHz z / Mass:38g



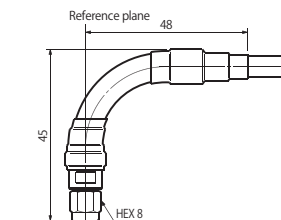
### N (m) swept (Code: NMW)

Maximum operating frequency: 18.0GHz z / Mass:46g



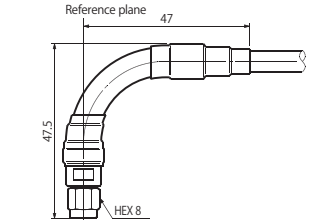
### SMA (m) swept (Code: AMW)

Maximum operating frequency: 18.5GHz z / Mass:17g



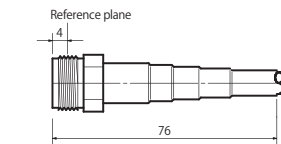
### 3.5mm (m) swept (Code: DMW)

Maximum operating frequency: 26.5GHz z / Mass:18g



### N (f) straight (Code: NFS)

Maximum operating frequency: 18.0GHz z / Mass:26g



• Swept and right angle are not available to armored type.  
• Please see P.82 about\* customer-specified swept and right angle connectors\*.  
• [ ] : Armored type size.

\*The above figures are measured values for reference only.

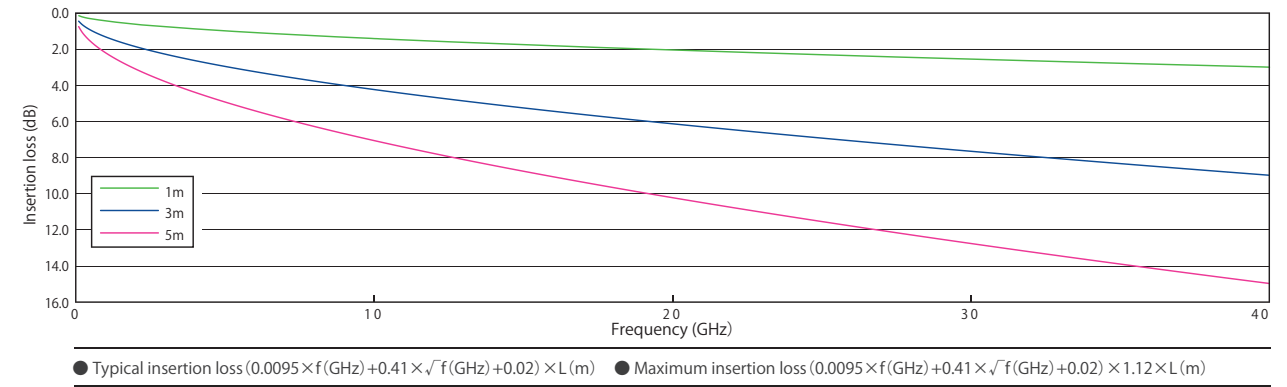
# 2 SERIES 241

- Static bending
- Flexibility
- Frequency 40.0 GHz
- Temperature range -30~+85°C
- Minimum bending radius 20 mm
- RoHS compliant
- Measurement
- Armored
- Lightweight Armored (for fixed wiring)
- Delivery time 5 days
- Listed in the catalogue manufactured to order
- Custom support

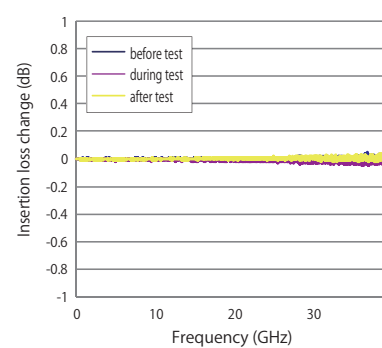


## Technical Data

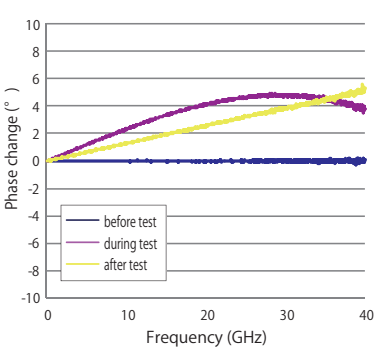
Cable typical insertion loss



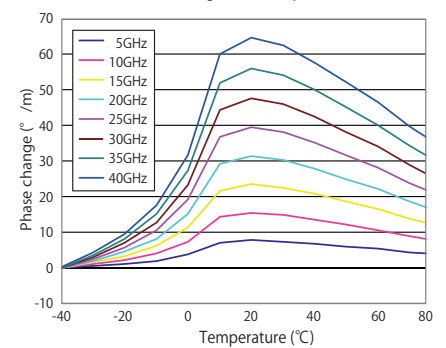
Static bending data (insertion loss, phase)



Bending radius: 20 mm



Phase change vs. temperature



\*The cable was wrapped 360° around φ40mm mandrel.

\*The cable was measured in chamber every 20 °C from -40 to 90 °C, 1 hour after the temperature changed.

## Property

Electrical properties	
Maximum operating frequency	40.0 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	88 pF/m
Propagation delay (typ.)	4.35 ns/m
Velocity of Propagation (typ.)	77 %
Higher mode frequency (typ.)	40.5 GHz
VSWR (per connector/ both ends of assy.)	1.197/1.43
Maximum frequency insertion loss (40.0 GHz)	3.0 dB/m

Mechanical properties	Standard type	Non-armored type custom-made	Lightweight Armored type (for fixed wiring)
Cable outer diameter	9.5 mm	4.1 mm	8 mm
Minimum bending radius (inner side)	20 mm	20 mm	20 mm
Cable mass (typ.)	137 g/m	35 g/m	98 g/m
Continuous operating temperature range	-30~+85 °C	-30~+85 °C	-30~+85 °C
Armored side pressure	196N/cm	-	196N/cm
Assembly length	700~5,000 mm	200~5,000 mm	500~5,000 mm

\*Take care when handling the non-armored type product because its outer diameter of the cable is thin.

**Order form example**  
Please provide the following information when placing an order.  
\* See P.45\*Connector combination codes\*

**Example 1**  
241 Armored type (standard)  
Assembly length: 1000mm  
Connector I : 2.92mm (m) straight  
Connector II : 2.92mm (m) straight  
Catalog No.  
MWX241-01000KMSKMS/B

**Example 2**  
241 Non-armored type  
\*The individual specification is required.

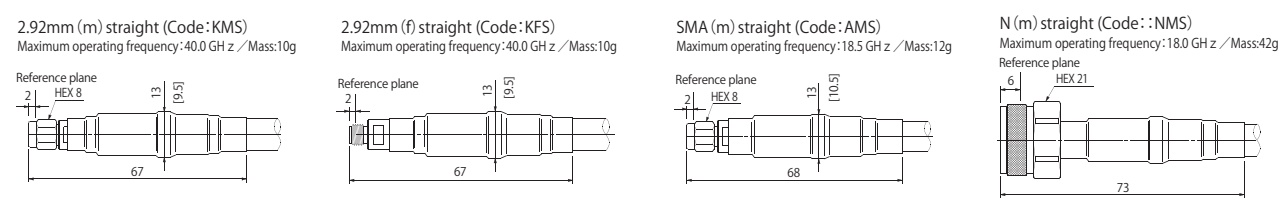
**Example 3**  
241 Lightweight Armored type  
Assembly length: 1000mm  
Connector I : 2.92mm (m) straight  
Connector II : 2.92mm (m) straight  
Catalog No.  
MWX241-01000KMSKMS/A

- a: Cable
- b: Assembly length
- c: Connector
- d: Armored

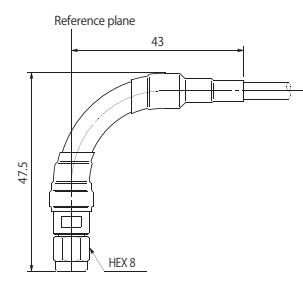
Option

We have the capacity to deliver products with matched phases for customers who require this characteristic.

## Connector



2.92mm (m) swept (custom-made)  
Maximum operating frequency: 40.0 GHz z / Mass: 17g



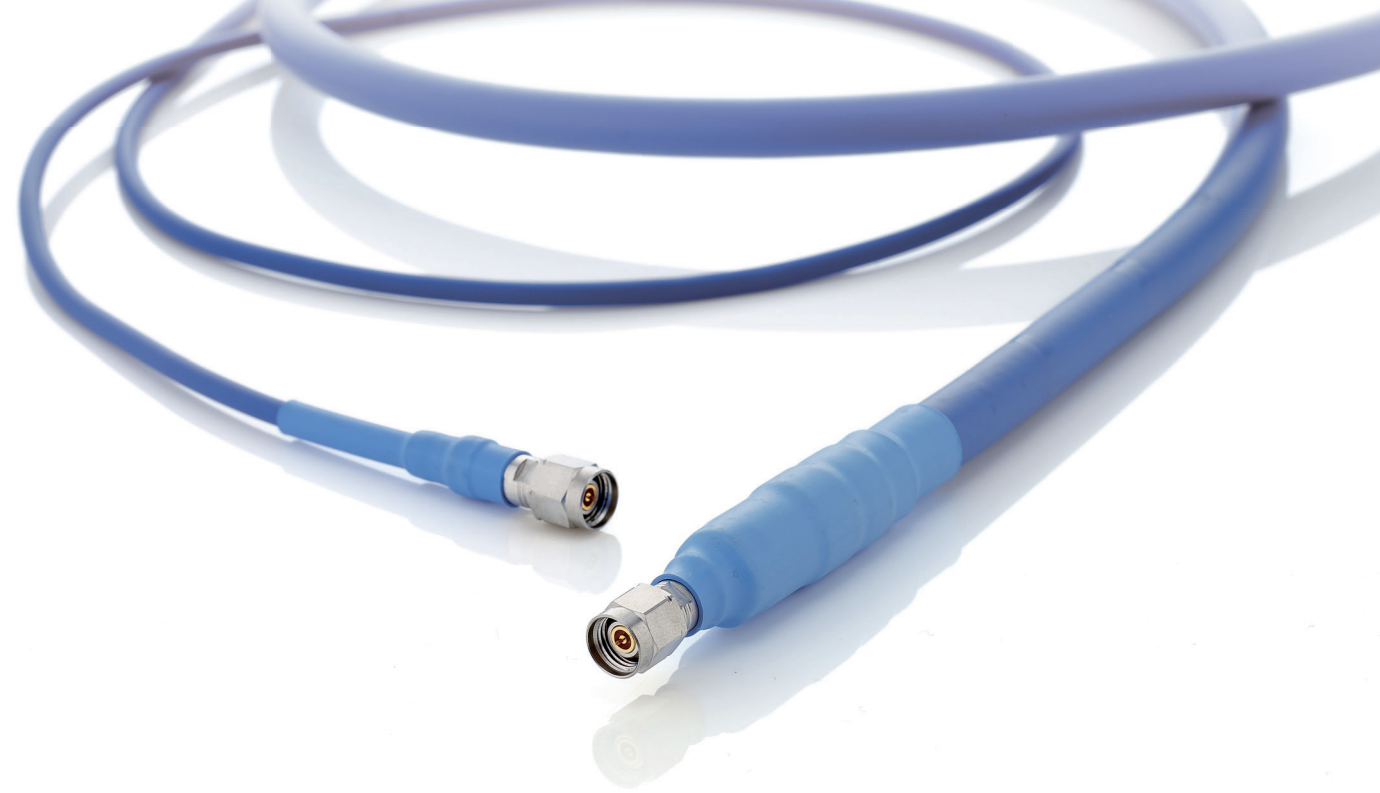
- Swept and right angle are not available to armored type.
- Please see P.82 about "customer-specified swept and right angle connectors".
- [ ] : Non - armored type size.

\*The above figures are measured values for reference only.

General Assembly Information  
0 Series  
1 Series  
2 Series  
3 Series  
4.5 Series  
MWX 6  
TECHNICAL DATA

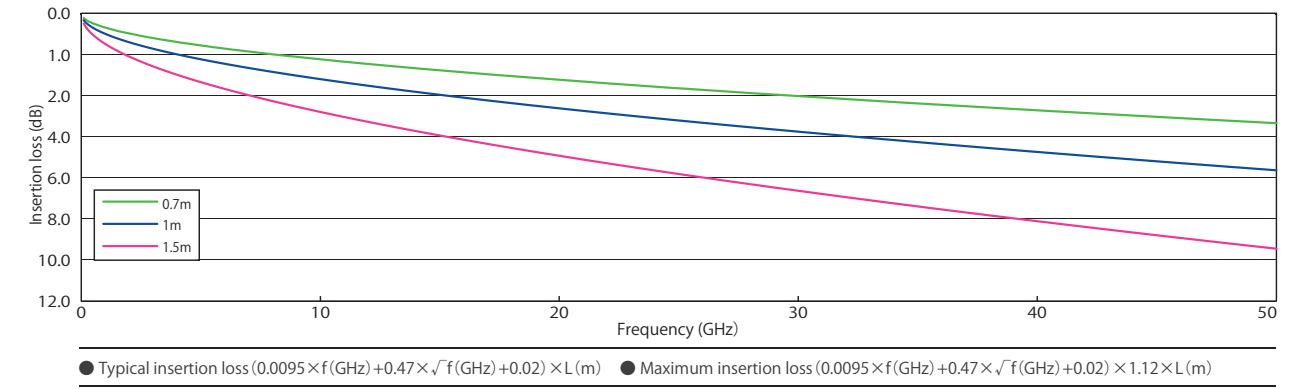
General Assembly Information  
0 Series  
1 Series  
2 Series  
3 Series  
4.5 Series  
MWX 6  
TECHNICAL DATA

# 2 SERIES 251

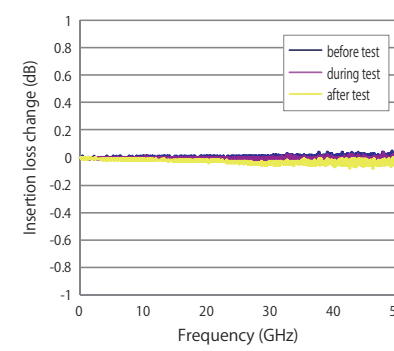


## Technical Data

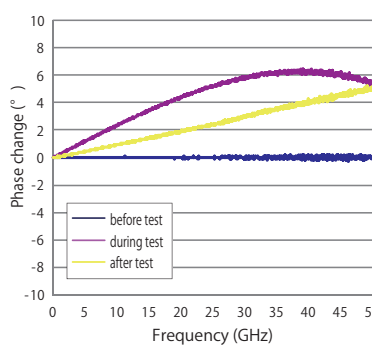
Cable typical insertion loss



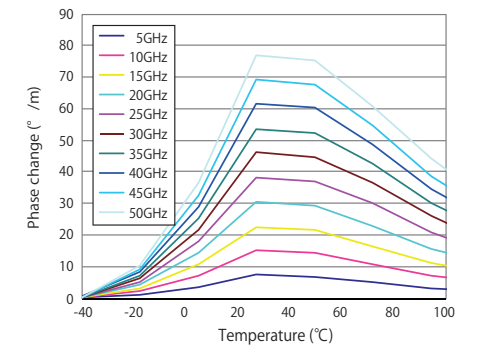
Static bending data (insertion loss, phase)



Bending radius: 20 mm



Phase change vs. temperature



\*The cable was wrapped 360° around φ40mm mandrel.

\*The cable was measured in chamber every 20 °C from -40 to 90 °C, 1 hour after the temperature changed.

## Property

### Electrical properties

Maximum operating frequency	50.0 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	88 pF/m
Propagation delay (typ.)	4.36 ns/m
Velocity of Propagation (typ.)	77 %
Higher mode frequency (typ.)	50.3 GHz
VSWR (per connector/ both ends of assy.)	1.197/1.43
Maximum frequency insertion loss (50.0 GHz)	3.8 dB/m

### Mechanical properties

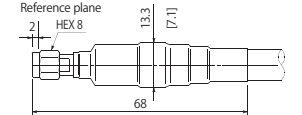
	Standard type	Non-armored type custom-made
Cable outer diameter	9.5 mm	3.7 mm
Minimum bending radius (inner side)	20 mm	6 mm
Cable mass (typ.)	129 g/m	29 g/m
Continuous operating temperature range	-30~+85 °C	-30~+85 °C
Armored side pressure	196N/cm	-
Assembly length	700~1,500 mm	200~1,500 mm

\*Take care when handling the non-armored type product because its outer diameter of the cable is thin.

## Connector

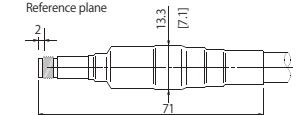
### 2.4mm (m) straight (Code:LMS)

Maximum operating frequency:50.0 GHz z / Mass:13g



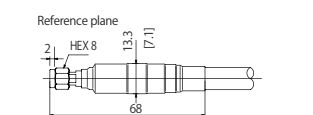
### 2.4mm (f) straight (Code:LFS)

Maximum operating frequency:50.0 GHz z / Mass:13g



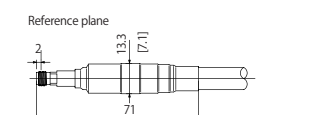
### 2.92mm (m) straight (Code:KMS)

Maximum operating frequency:40.0 GHz z / Mass:13g



### 2.92mm ( f ) straight (Code:KFS)

Maximum operating frequency:40.0 GHz z / Mass:13g



[ ] : Non - armored type size.

### Order form example

Please provide the following information when placing an order.

\* See P.45\*Connector combination codes\*

Example 1  
251 Armored type (standard)  
Assembly length: 1000mm  
Connector I :2.4mm (m) straight  
Connector II :2.4mm (m) straight  
Catalog No.  
MWX251-01000LMSLMS/B

a b c d

Example 2  
251 Non-armored type

\*The individual specification is required.

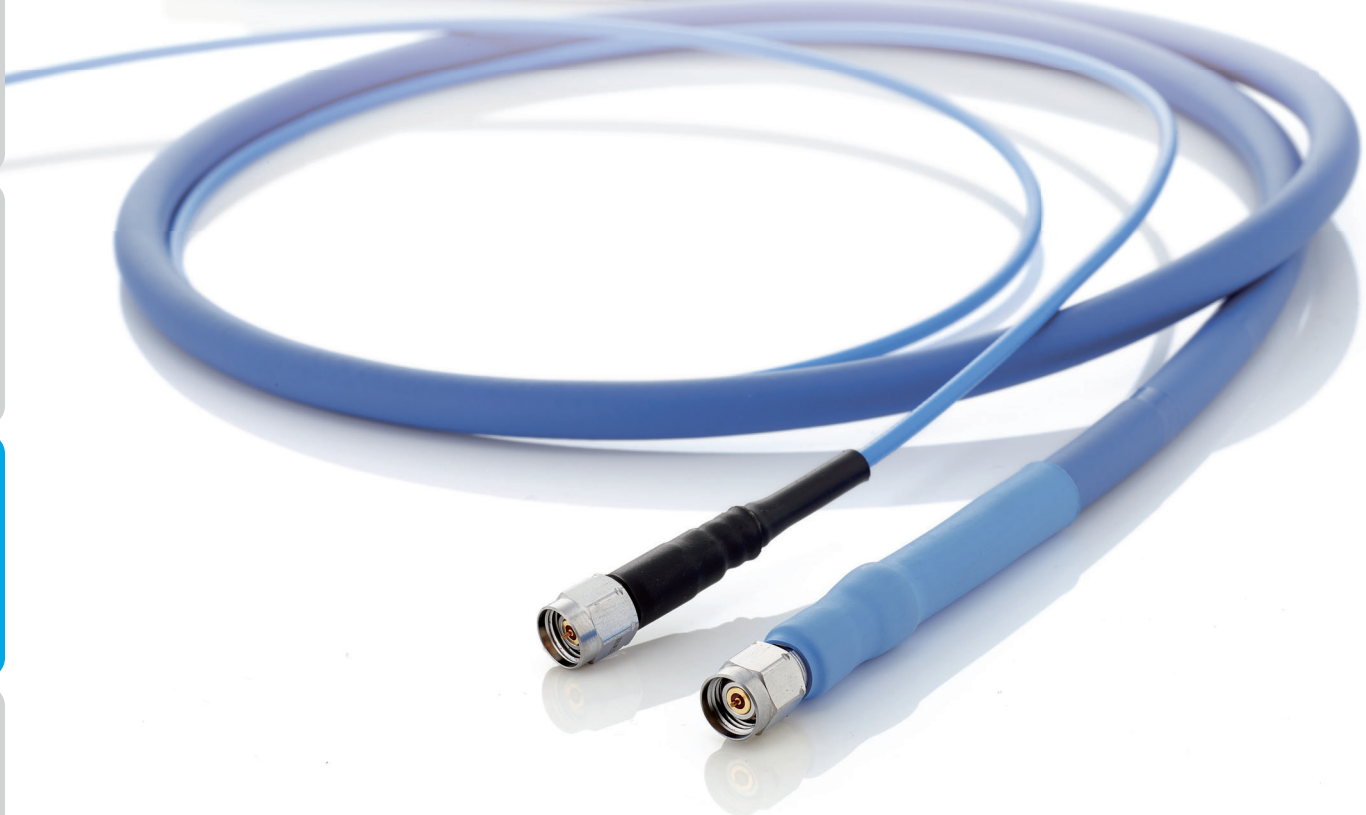
a:Cable  
b:Assembly length  
c:Connector  
d:Armored

We have the capacity to deliver products with matched phase for customers who require this characteristic.

Option

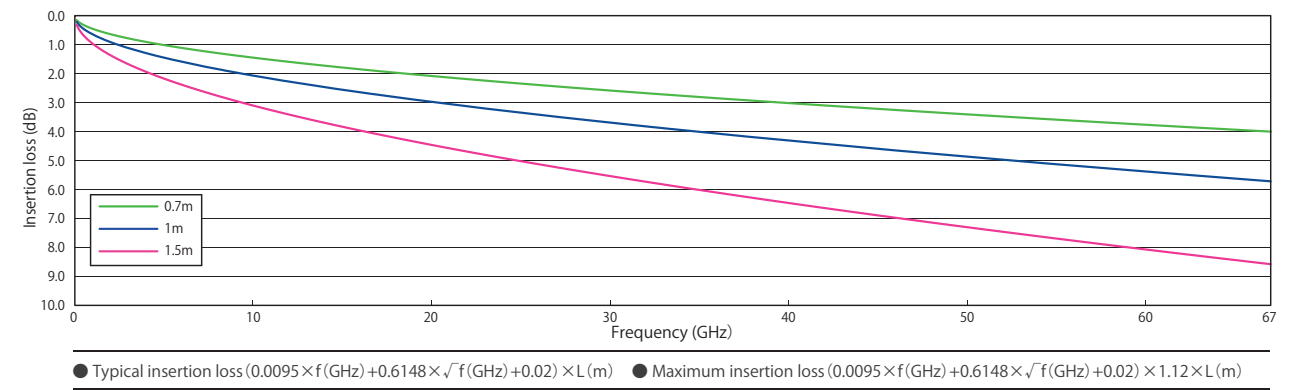
\*The above figures are measured values for reference only.

# 2 SERIES 261

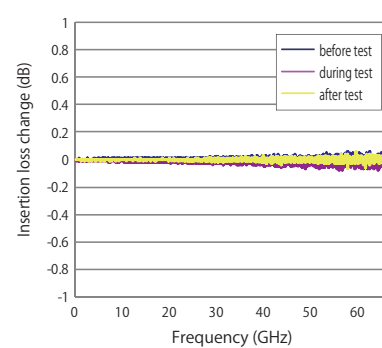


## Technical Data

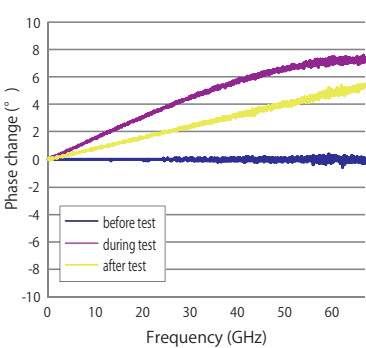
Cable typical insertion loss



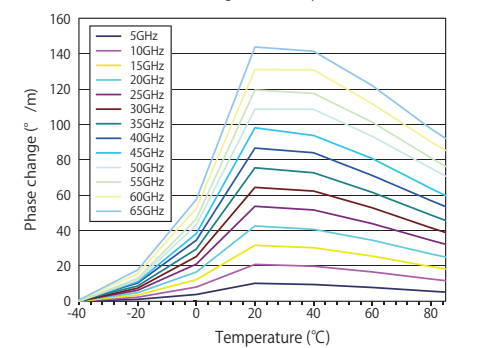
Static bending data (insertion loss, phase)



Bending radius: 20 mm



Phase change vs. temperature



\*The cable was wrapped 360° around φ40mm mandrel.

\*The cable was measured in chamber every 20 °C from -40 to 90 °C, 1 hour after the temperature changed.

## Property

Electrical properties	
Maximum operating frequency	67.0 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	90 pF/m
Propagation delay (typ.)	4.38 ns/m
Velocity of Propagation (typ.)	76 %
Higher mode frequency (typ.)	67.0 GHz
VSWR (per connector/ both ends of assy.)	1.197/1.43
Maximum frequency insertion loss (67.0 GHz)	5.6 dB/m

Mechanical properties	Standard type	Non-armored type custom-made
Cable outer diameter	7.7 mm	2.6 mm
Minimum bending radius (inner side)	20 mm	6 mm
Cable mass (typ.)	90 g/m	17 g/m
Continuous operating temperature range	-30~+85 °C	-30~+85 °C
Armored side pressure	196N/cm	-
Assembly length	700~1,500 mm	200~1,500 mm

\*Take care when handling the non-armored type product because its outer diameter of the cable is thin.

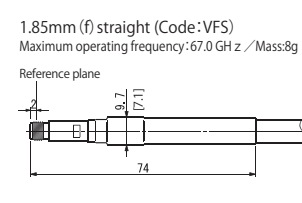
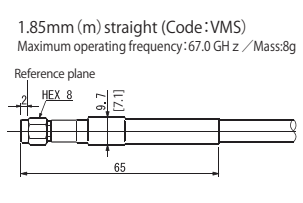
**Order form example**  
Please provide the following information when placing an order.

**Example 1**  
261 Armored type (standard)  
Assembly length: 1000 mm  
Connector I : 1.85 mm (m) straight  
Connector II : 1.85 mm (m) straight  
Catalog No.  
MWX261-01000VMSVMS/B

**Example 2**  
261 Non-armored type  
\* The individual specification is required.

- a: Cable
- b: Assembly length
- c: Connector
- d: Armored

## Connector



[ ] : Non - armored type size.

We have the capacity to deliver products with matched phases for customers who require this characteristic.

**Option**

\*The above figures are measured values for reference only.