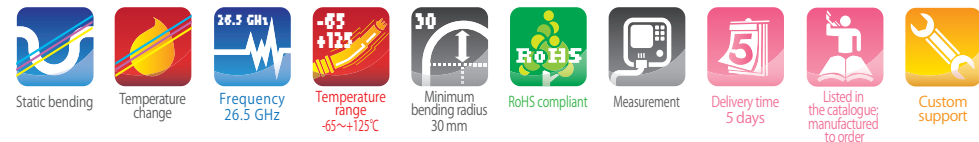


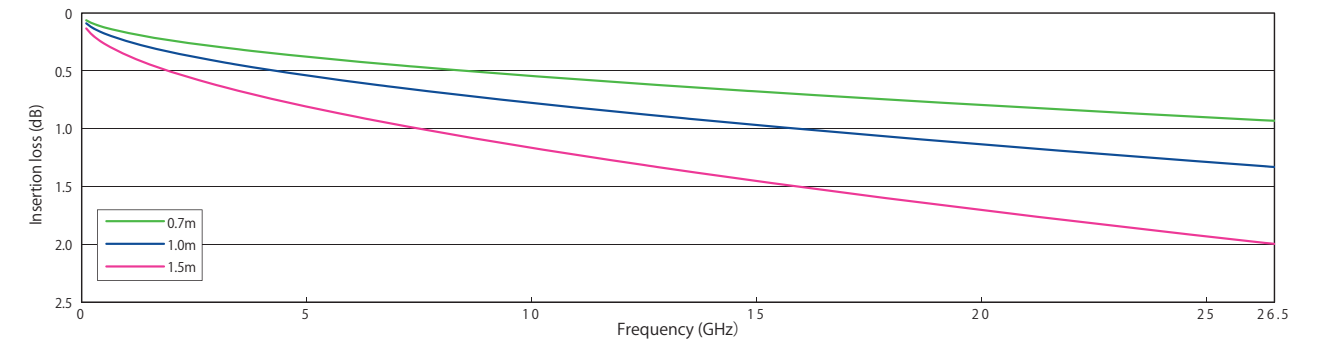
1 SERIES

121



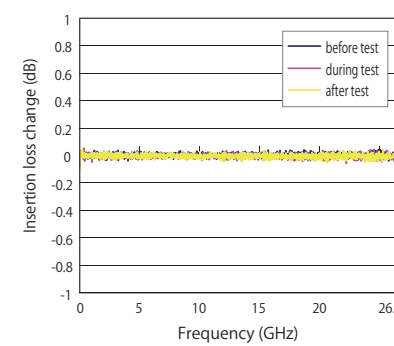
Technical Data

Cable typical insertion loss

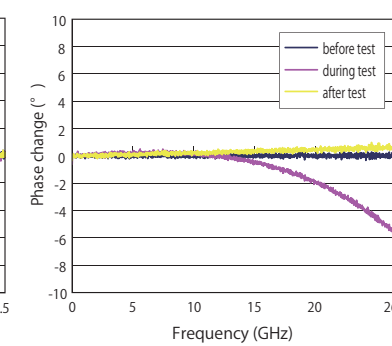


● Typical insertion loss $(0.0077 \times f(\text{GHz}) + 0.215 \times \sqrt{f(\text{GHz})} + 0.02) \times L(\text{m})$ ● Maximum insertion loss $(0.0077 \times f(\text{GHz}) + 0.215 \times \sqrt{f(\text{GHz})} + 0.02) \times 1.12 \times L(\text{m})$

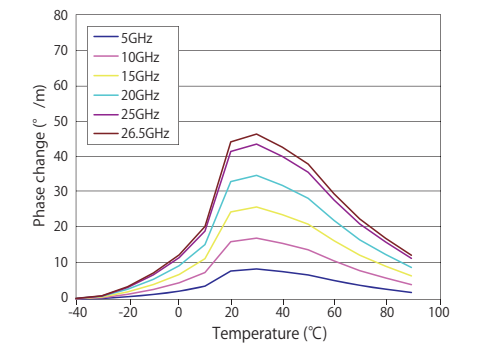
Static bending data (insertion loss, phase)



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
Characteristic impedance	50±1 Ω
Capacitance (typ.)	88 pF/m
Propagation delay (typ.)	4.28 ns/m
Velocity of Propagation (typ.)	78 %
Higher mode frequency (typ.)	27.0 GHz
VSWR (per connector/ both ends of assy.)	1.153/1.33
Maximum frequency insertion loss (26.5 GHz)	1.3 dB/m

Mechanical properties

Cable outer diameter	6.6 mm
Minimum bending radius (inner side)	30 mm
Cable mass (typ.)	80 g/m
Continuous operating temperature range	-65~+125 °C
Assembly length	200~5,000 mm

Example MWX121

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

Catalog No.
 MWX121-01000DFSDMS

a: Cable
 b: Assembly length
 c: Connector

Order form example

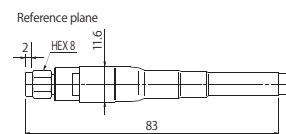
Please provide the following information when placing an order.

* See P.33 "Connector combination codes"

Connector

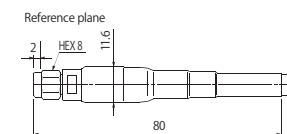
SMA (m) straight (Code: AMS)

Maximum operating frequency: 18.5 GHz z / Mass: 14g



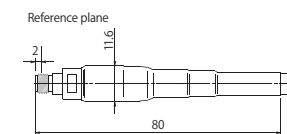
3.5mm (m) straight (Code: DMS)

Maximum operating frequency: 26.5 GHz z / Mass: 13g



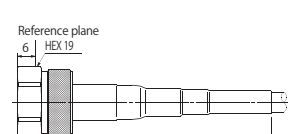
3.5mm (f) straight (Code: DFS)

Maximum operating frequency: 26.5 GHz z / Mass: 12g



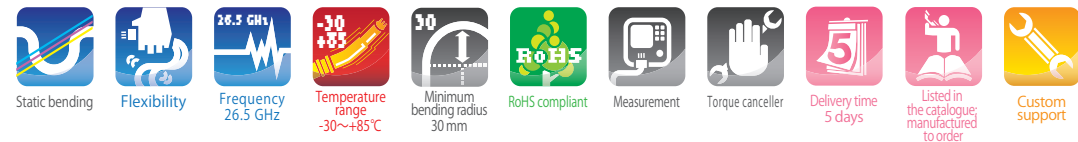
N (m) straight (Code: NMS)

Maximum operating frequency: 18.0 GHz z / Mass: 36g



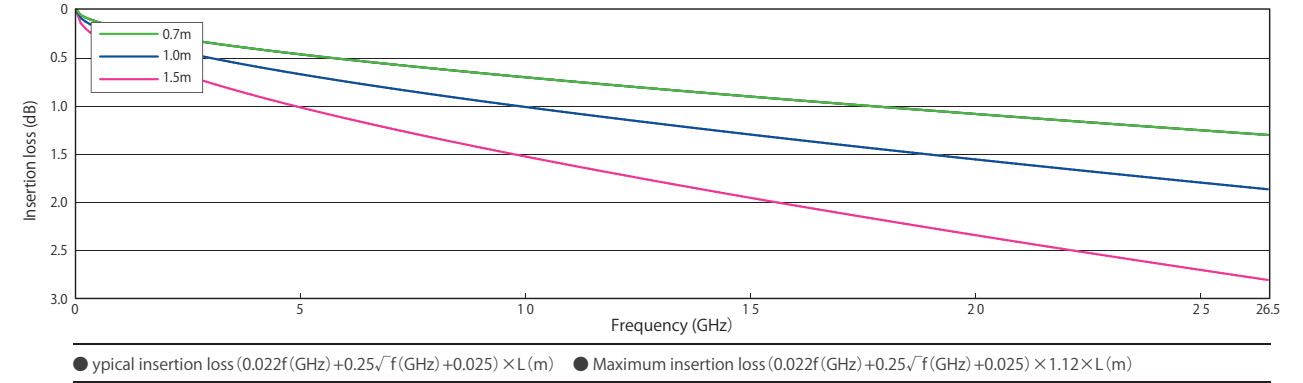
*The above figures are measured values for reference only.

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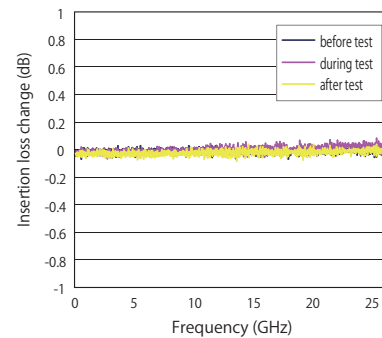


Technical Data

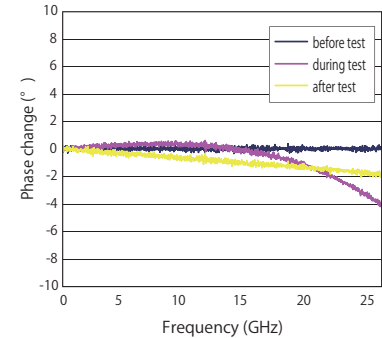
Cable typical insertion loss



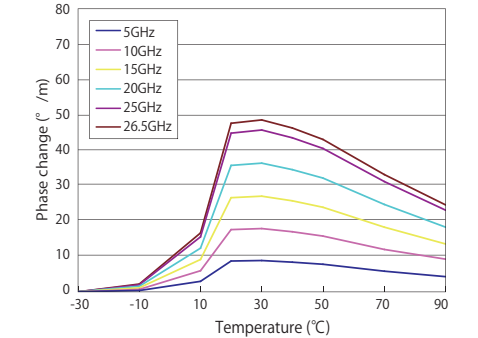
Static bending data (insertion loss, phase)



Bending radius: 30 mm



MWX122 Phase change vs. temperature



* The cable was wrapped 360° around φ60mm mandrel.

* The cable was measured in chamber every 20 °C from -30 to 90 °C, 1 hour after the temperature changed.

Property

Electrical properties	
Maximum operating frequency	26.5 GHz
Characteristic impedance	50 ± 1 Ω
Capacitance (typ.)	89 pF/m
Propagation delay (typ.)	4.39 ns/m
Velocity of Propagation (typ.)	76 %
Higher mode frequency (typ.)	27.0 GHz
VSWR (per connector/both ends of assy.)	1.153/1.33
Maximum frequency insertion loss (26.5 GHz)	1.9 dB/m

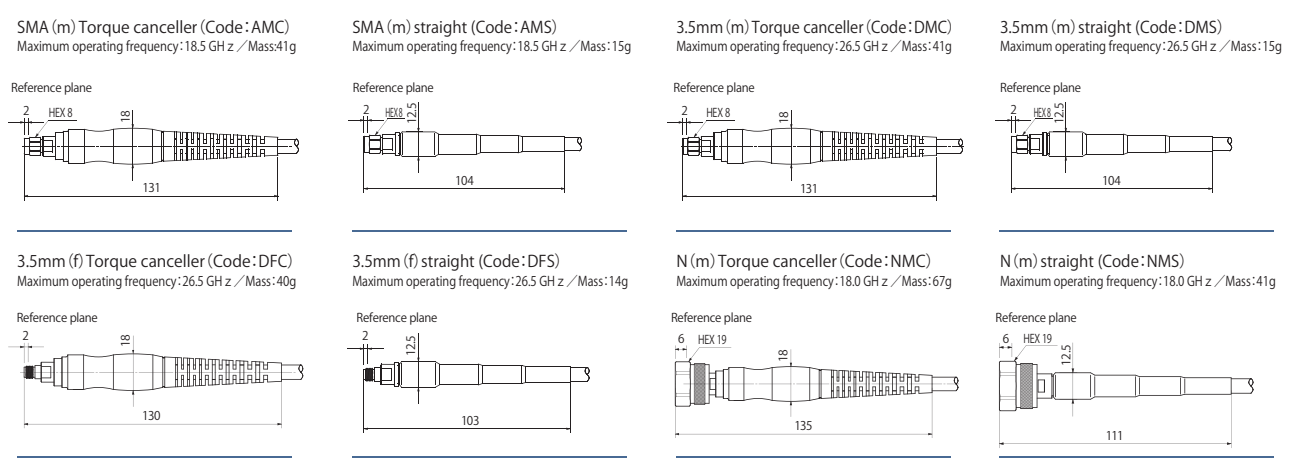
Mechanical properties	
Cable outer diameter	6.5 mm
Minimum bending radius (inner side)	30 mm
Cable mass (typ.)	79 g/m
Continuous operating temperature range	-30 ~ +85 °C
Assembly length	300 ~ 3,000 mm

Order form example
Please provide the following information when placing an order.
* See P.33*Connector combination codes*

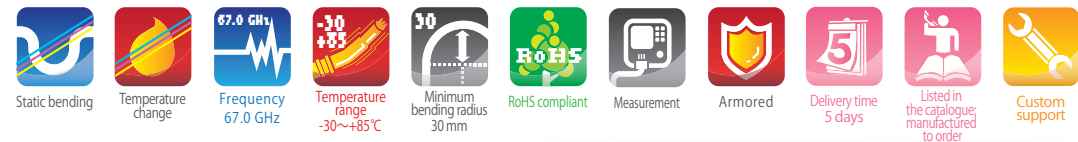
Example MWX122
Assembly length: 1000 mm
Connector I : 3.5 mm (f) straight torque canceller
Connector II : 3.5 mm (m) straight torque canceller
Catalog No. MWX122-01000DFCDMC

a: Cable
b: Assembly length
c: Connector

Connector

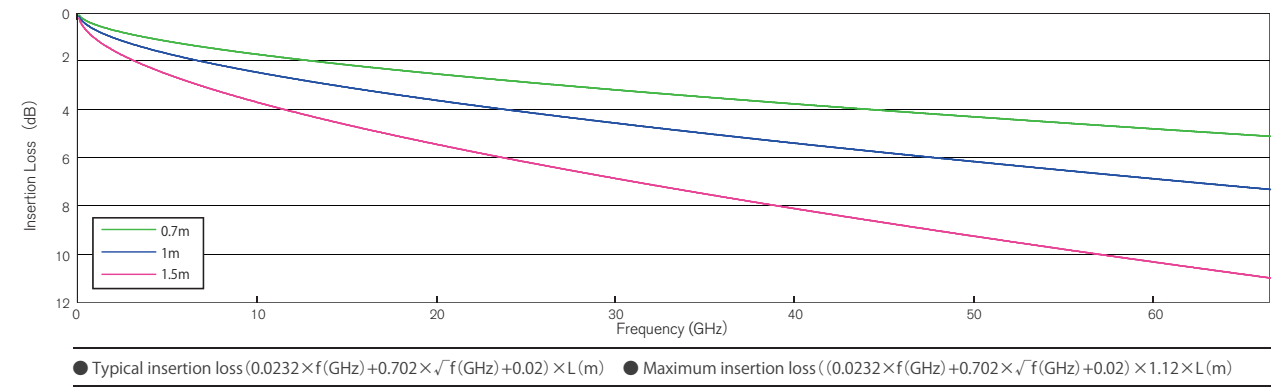


* The above figures are measured values for reference only.

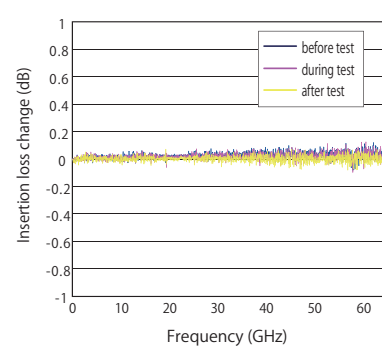


Technical Data

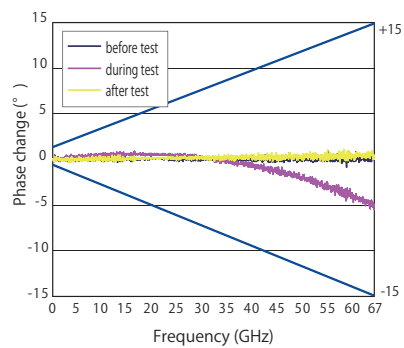
Cable typical insertion loss



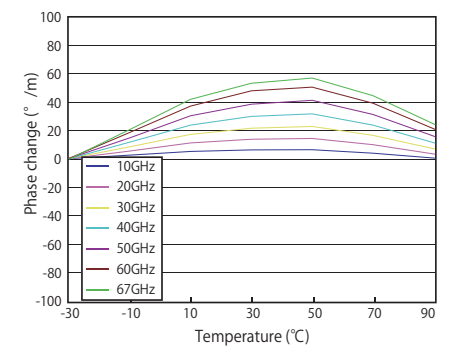
Static bending data (insertion loss, phase)



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 -30 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.)	4.35 ns/m
Velocity of Propagation (typ.)	77 %
Higher mode frequency (typ.)	70.0 GHz
VSWR (per connector/both ends of assy.)	1.30
Maximum frequency insertion loss (26.5 GHz)	7.3 dB/m

Mechanical properties

Maximum outer diameter	7.9 mm
Cable outer diameter	6.5 mm
Minimum bending radius (inner side)	30 mm
Cable mass (typ.)	79 g/m
Continuous operating temperature range	-65~+125 °C
Armored side pressure	196 N/cm
Assembly length	300~3,000 mm

Example

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

Catalog No. MWX161-01000DMSDMS/B



Example

Assembly length: 610 mm
 Connector I : 2.4mm (m) straight
 Connector II : 1.85mm (m) straight

Catalog No. MWX161-00610LMSVMS/B



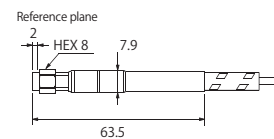
- a: Cable
- b: Assembly length
- c: Connector
- d: Armored

Order form example

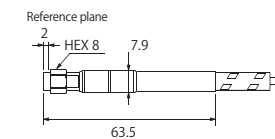
Please provide the following information when placing an order.

Connector

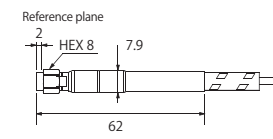
3.5mm (m) straight (Code: DMS)
 Maximum operating frequency: 26.5 GHz / Mass: 8g



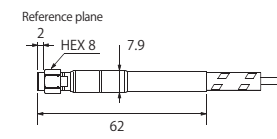
2.92mm (m) straight (Code: KMS)
 Maximum operating frequency: 40.0 GHz / Mass: 8g



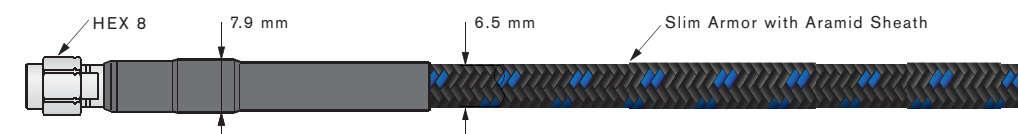
2.4mm (m) straight (Code: LMS)
 Maximum operating frequency: 50.0 GHz / Mass: 8g



1.85mm (m) straight (Code: VMS)
 Maximum operating frequency: 67.0 GHz / Mass: 8g



Cable assemblies with a small diameter at the neck



*The above figures are measured values for reference only.