

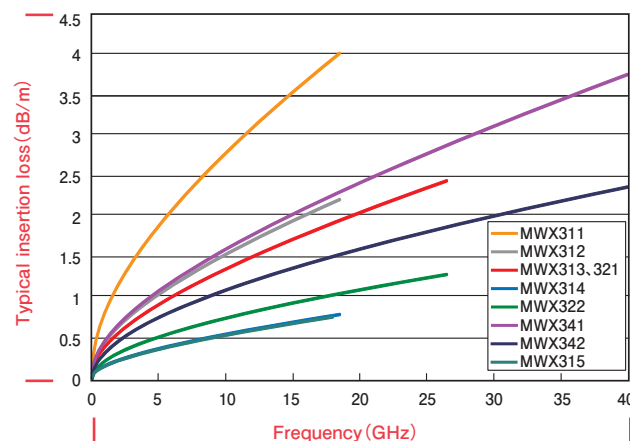
MWX3 SERIES

Cable assemblies for equipment wiring

How to select

The MWX3 series cable assemblies use a porous PTFE dielectric material to ensure excellent phase stability against temperature fluctuations.
(Continuous operating temperature range: -65 °C to 125 °C (-30 °C to 85 °C for MWX315))

MWX3 Series typical insertion loss

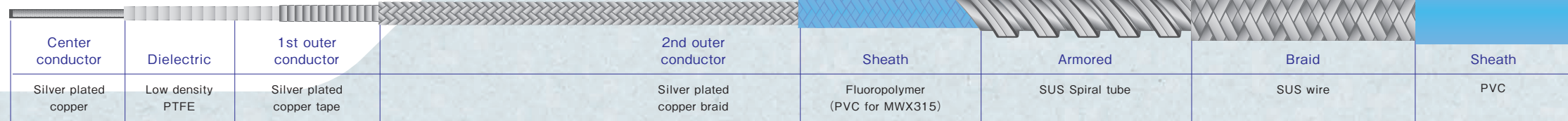


*MWX313:~18.5 GHz, MWX321:~26.5 GHz
*MWX312:~18.5 GHz, MWX341:~40.0 GHz

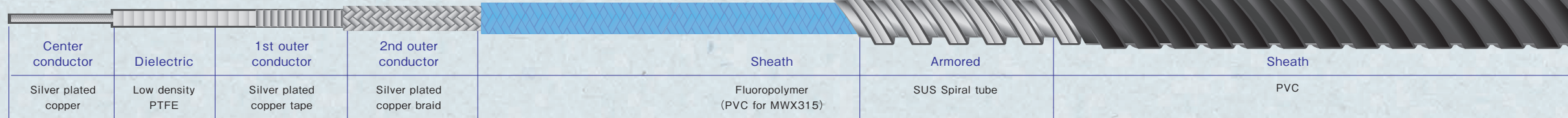
Simple criteria for cable selection

- Insertion loss: The larger the cable outer diameter, the lower the insertion loss.
- Frequency range: The smaller the cable, the higher the higher mode frequency.
- Power rating: The larger the cable outer diameter, the higher the power rating.
- Flexibility: The smaller the cable, the better the flexibility.
- Mass: The smaller the cable, the lighter the cable.

Cable Structure Armored type



Cable Structure Lightweight armored type (for fixed wiring)



Simple criteria for connector selection

- Choose a suitable connector for your measuring instrument.
- The smaller the connector, the higher the maximum operating frequency.
- The larger the connector, the higher the power rating.

Connector compatibility

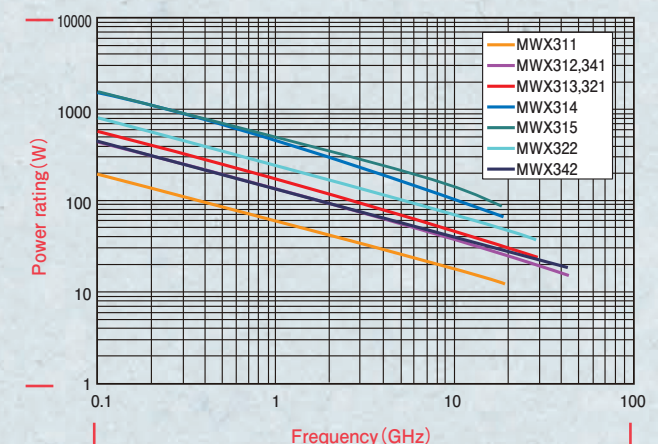
Cable type	Cable maximum operating frequency (GHz)	Compatible connector													
		10.0 GHz	15.0 GHz	18.5 GHz					26.5 GHz		40.0 GHz				
		SMA (m) right angle	TNC (m)	SMA (m)	SMA (f)	SSMA (m)	N (m)	N(m) Lightweight type	3.5mm(m)	3.5mm(f)	SMA (m)	2.92mm(m)	2.92mm(f)	2.4mm(m)	2.4mm(f)
MWX311	18.5 GHz	●		●	●	●									
MWX312		● (*1)	●	● (*2)	●		●								
MWX313		●	●	● (*2)	●		●		● (18.5 GHz)						
MWX314			● (18.5 GHz)	●			●								
MWX315	18.0 GHz			● (18.0 GHz)			● (18.0 GHz)	● (18.0 GHz)							
MWX321	26.5 GHz			● (26.5 GHz/ *3)					●						
MWX322				●			● (18.0GHz)		●	●					
MWX341	40.0 GHz										● (*4)				
MWX342												●	●	●	●

(*1) Available SMA(m) right angle type up to 18.0GHz.
(*2) Phase Matching Connector is also available upon the requirement.
(*3) (*4) Those SMA(m) connectors are uniquely developed by Junkosha, which specified to be used for 26.5 GHz and 40 GHz.
*See the individual specification of each cables.

Power rating

The diagram to the right shows the relationship between frequency and power rating.
The values are calculated at 25 °C and at sea level.
The power rating will need to be corrected for different ambient temperatures and altitude.
Power ratings may decrease, depending on the connector selected.
*The above figures are measured values for reference only.

Power rating of MWX3 series at sea level



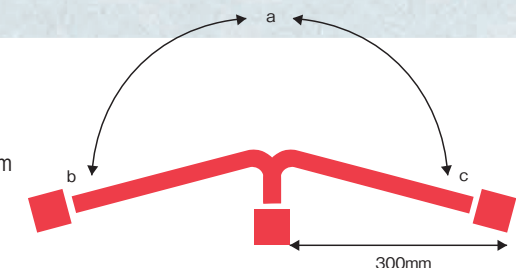
Cable Structure Non-armored type



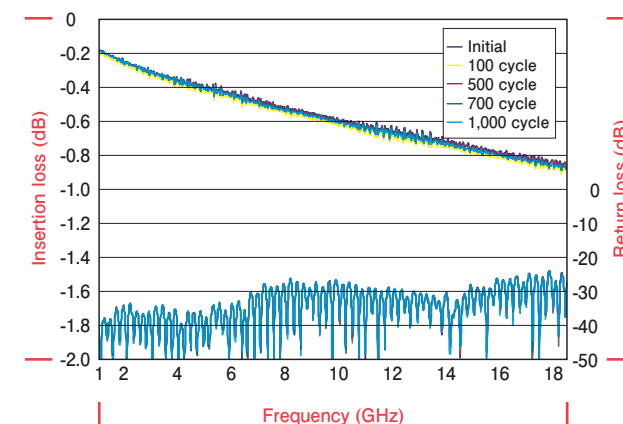
Bending test data of MWX312

Test method

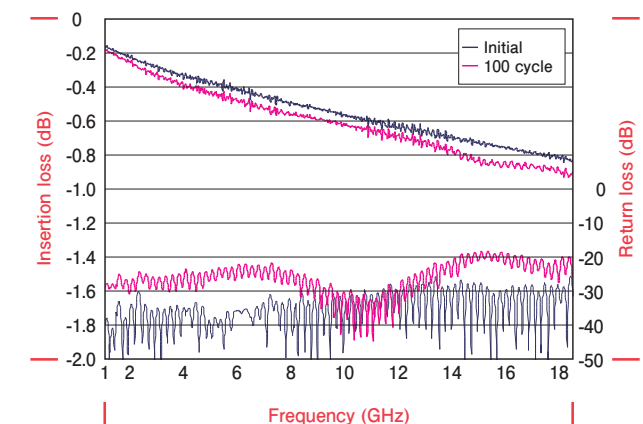
The connector on one end of test cable (MXW312-00500AMSAMS, measuring 500 mm in length and with SMA (m) connectors on both ends) was fixed in place.
The connector on the other end was moved in the sequence a → b → c, after which initial insertion loss and return loss values were compared to those after the test.



MWX312-00500AMSAMS



Previous product



*The above figures are measured values for reference only.

MWX3 SERIES
MWX 311



Temperature change



Frequency 18.5 GHz



Temperature range -65~+125°C



Minimum bending radius 10 mm



RoHS compliant



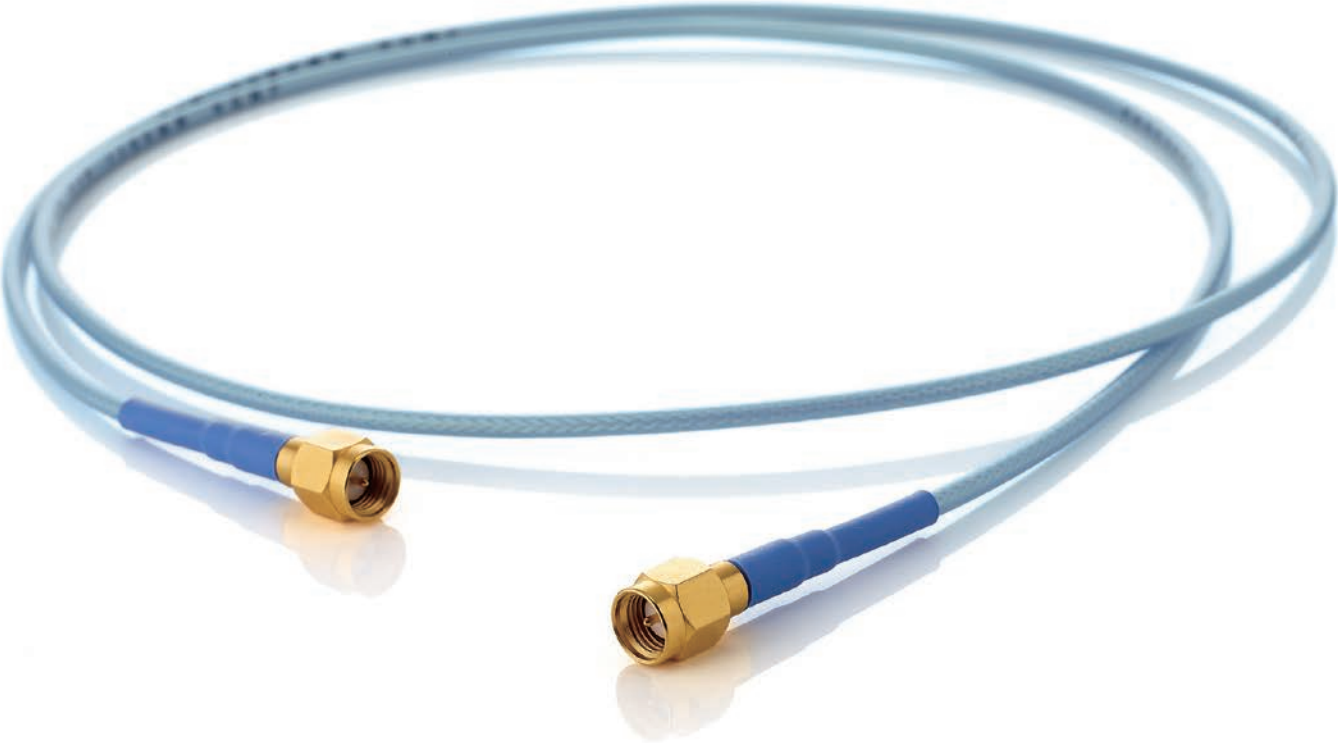
Equipment wiring



Listed in the catalogue; manufactured to order



Custom support



Property

Electrical properties

Maximum operating frequency	18.5 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	86 pF/m
Propagation delay (typ.)	4.25 ns/m
Wavelength reduction rate (typ.)	79 %
Higher mode frequency (typ.)	75.0 GHz
VSWR (per connector/ both ends of assy.)	1.182/1.40
Maximum frequency insertion loss(18.5 GHz)	3.4 dB/m

Mechanical properties

Cable outer diameter	2.7 mm
Minimum bending radius (inner side)	10 mm
Maximum tensile strength	29.4 N(3kgf)
Cable mass (typ.)	18.5 g/m
Continuous operating temperature range	-65~+125 °C
Assembly length	100~10,000 mm

Order form example

Please provide the following information when placing an order.

* See P.67 "Connector combination codes"

Example 1 MWX311

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

Catalog No.
MWX311-01000AMSAMS
a b c

Example 2 MWX311

Assembly length : 1500 mm
Connector I : SMA(f)straight
Connector II : SMA(m)right angle

Catalog No.
MWX311- 01500AFSAMR
a b c

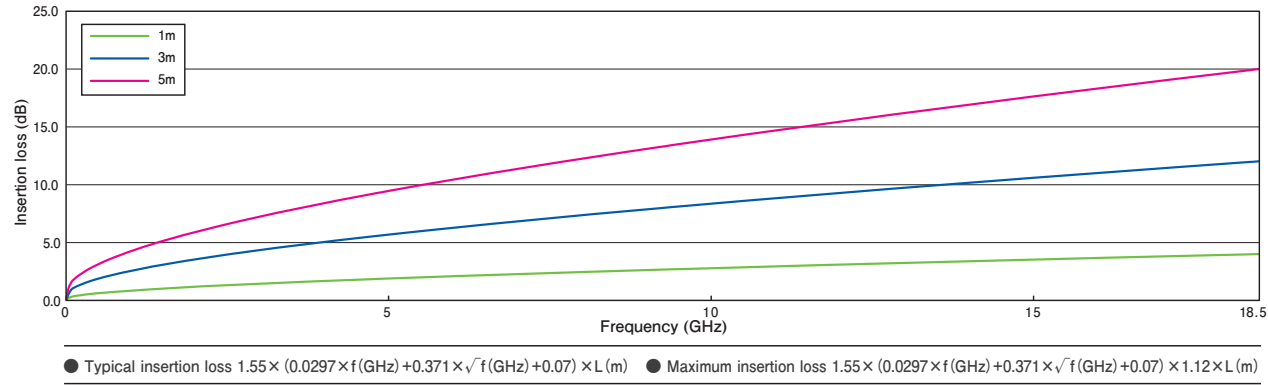
a:Cable
b:Assembly length
c:Connector

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

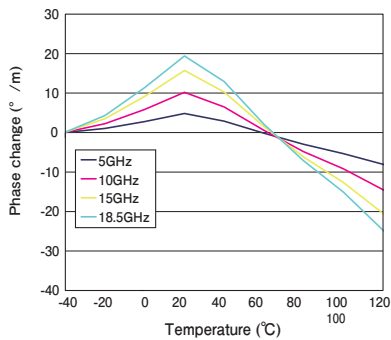
Option

Technical Data

Cable typical insertion loss



MWX311 Phase change vs. temperature

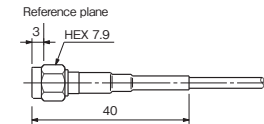


* The cable was measured in chamber every 20 °C from -40 °C, 1 hour after the temperature changed.

Connector

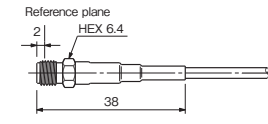
SMA(m) straight (Code:AMS)

Maximum operating frequency:18.5 GHz / Mass:3g



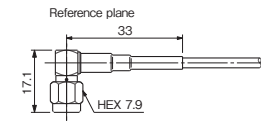
SMA(f) straight (Code:AFS)

Maximum operating frequency:18.5 GHz / Mass:3g



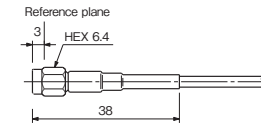
SMA(m) right angle (Code:AMR)

Maximum operating frequency:10.0 GHz / Mass:5g



SSMA(m) straight (Code:SMS)

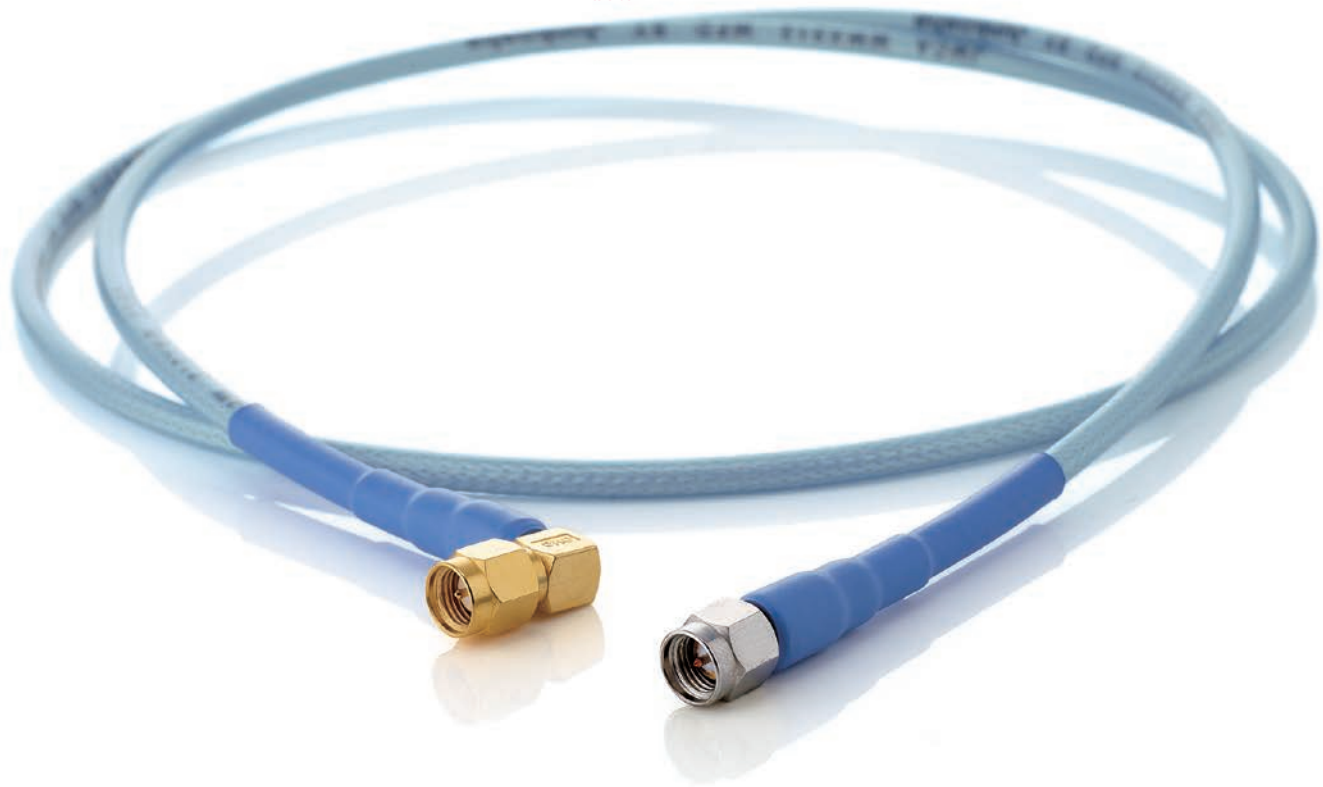
Maximum operating frequency:18.5 GHz / Mass:3g



* Please see P.82 about " customer-specified swept and right angle connectors".

*The above figures are measured values for reference only.

MWX3 SERIES
MWX 312



Property

Electrical properties

Maximum operating frequency	18.5 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	82 pF/m
Propagation delay (typ.)	4.10 ns/m
Wavelength reduction rate (typ.)	81 %
Higher mode frequency (typ.)	44.0 GHz
VSWR (per connector/ both ends of assy.)	1.182/1.40
Maximum frequency insertion loss(18.5 GHz)	2.2 dB/m

Mechanical properties

Cable outer diameter	4.1 mm
Minimum bending radius (inner side)	20 mm
Maximum tensile strength	98 N(10 kgf)
Cable mass (typ.)	42 g/m
Continuous operating temperature range	-65~+125 °C
Assembly length	100~20,000 mm

Order form example

Please provide the following information when placing an order.

* See P.67 "Connector combination codes"

Example 1 MWX312

Assembly length: 1200 mm
Connector I : SMA(m) straight
Connector II : SMA(m) straight

Catalog No.
MWX312-01200AMSAMS
a b c

Example 2 MWX312

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

Catalog No.
MWX312-01000AFSNMS
a b c

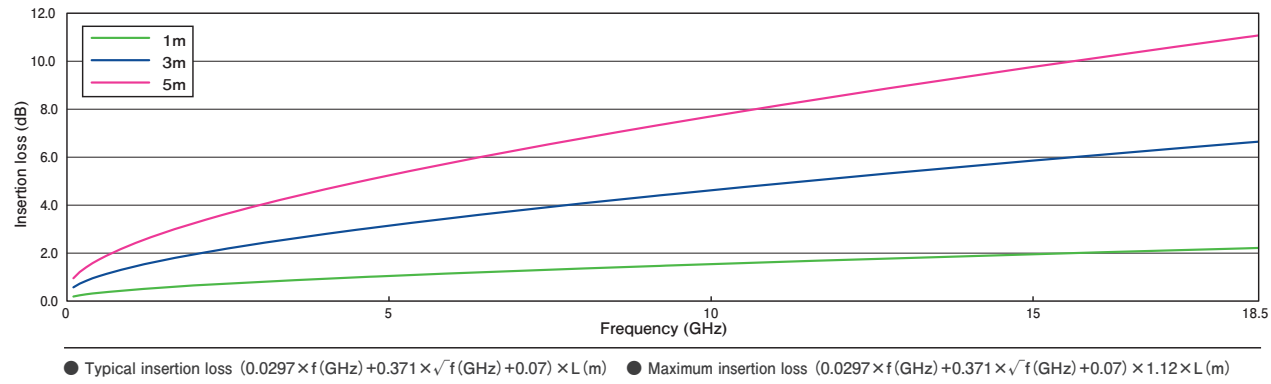
a:Cable
b:Assembly length
c:Connector

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

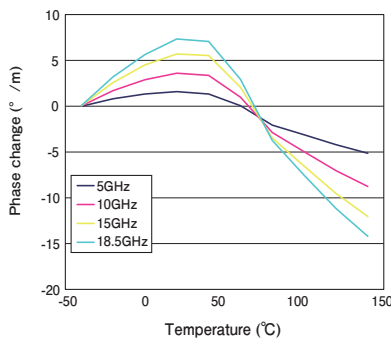
Option

Technical Data

Cable typical insertion loss



MWX312 Phase change vs. temperature

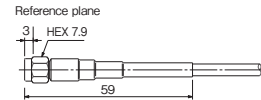


* The cable was measured in chamber every 20 °C from -40 °C, 1 hour after the temperature changed.

Connector

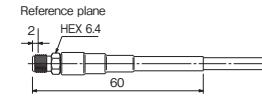
SMA(m) straight (Code:AMS)

Maximum operating frequency:18.5 GHz / Mass:3g



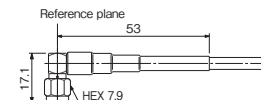
SMA(f) straight (Code:AFS)

Maximum operating frequency:18.5 GHz / Mass:3g



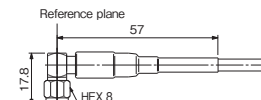
SMA(m) right angle (Code:AMR)

Maximum operating frequency:10.0 GHz / Mass:5g



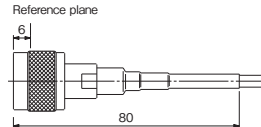
SMA(m) right angle (Code:AMH)

Maximum operating frequency:18.0 GHz / Mass:12g



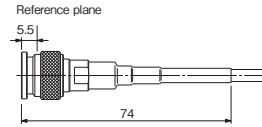
N(m) straight (Code:NMS)

Maximum operating frequency:18.5 GHz / Mass:39g



TNC(m) straight (Code:CMS)

Maximum operating frequency:15.0 GHz / Mass:21g



* Please see P.82 about " customer-specified swept and right angle connectors".

*The above figures are measured values for reference only.

MWX 3 SERIES
MWX 313



Temperature change



Frequency 18.5 GHz



Temperature range -65~+125°C



Minimum bending radius 30 mm



RoHS compliant



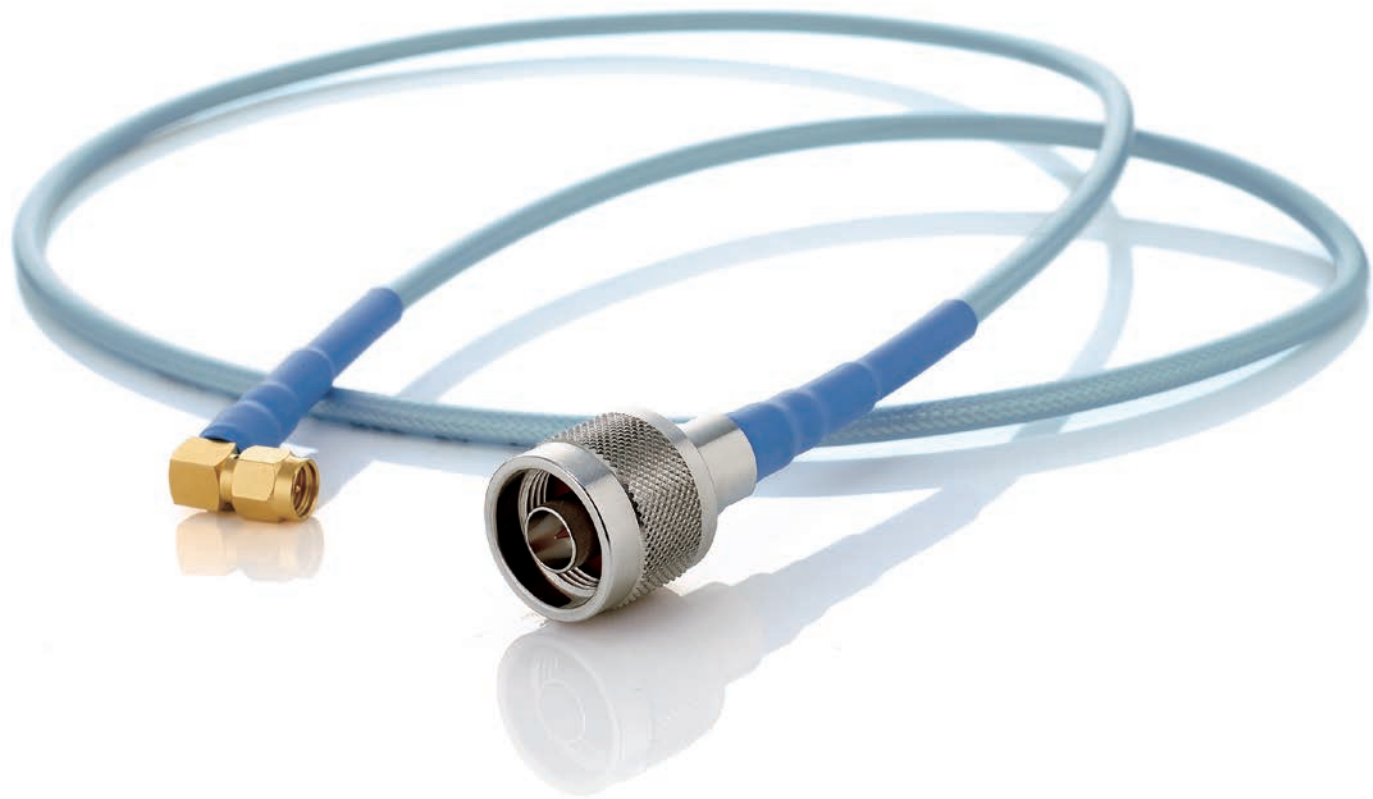
Equipment wiring



Listed in the catalogue, manufactured to order



Custom support



Property

Electrical properties

Maximum operating frequency	18.5 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	80 pF/m
Propagation delay (typ.)	4.05 ns/m
Wavelength reduction rate (typ.)	82 %
Higher mode frequency (typ.)	37 GHz
VSWR (per connector/both ends of assy.)	1.182/1.40
Maximum frequency insertion loss(18.5 GHz)	1.9 dB/m

Mechanical properties

Cable outer diameter	4.7 mm
Minimum bending radius (inner side)	30 mm
Maximum tensile strength	98 N(10 kgf)
Cable mass (typ.)	52 g/m
Continuous operating temperature range	-65~+125 °C
Assembly length	100~20,000 mm

Order form example

Please provide the following information when placing an order.

* See P.67 "Connector combination codes"

Example 1 MWX313

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

Catalog No.
MWX313-01000AMSAMS
a b c

Example 2 MWX313

Assembly length: 1500 mm
Connector I :SMA(f)straight
Connector II :SMA(m)right angle

Catalog No.
MWX313-01500AFSAMR
a b c

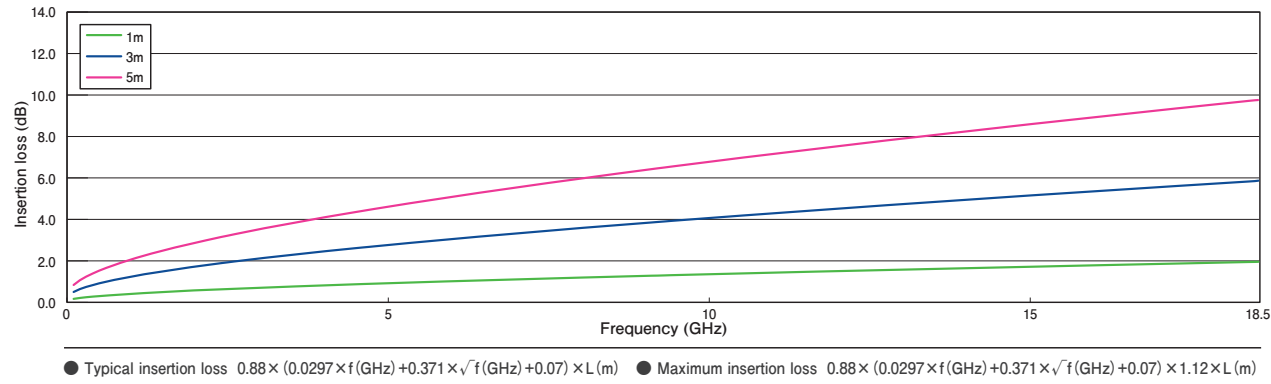
a:Cable
b:Assembly length
c:Connector

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

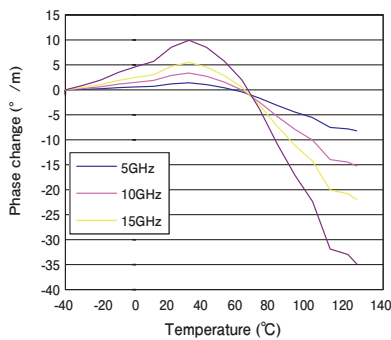
Option

Technical Data

Cable typical insertion loss



MWX313 Phase change vs. temperature



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

Connector

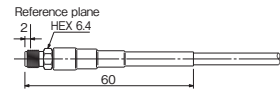
SMA(m) straight (Code:AMS)

Maximum operating frequency:18.5 GHz / Mass:3g



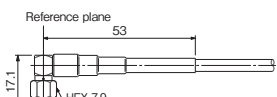
SMA(f) straight (Code:AFS)

Maximum operating frequency:18.5 GHz / Mass:3g



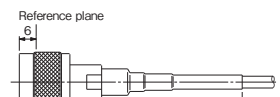
SMA(m) right angle (Code:AMR)

Maximum operating frequency:10.0 GHz / Mass:5g



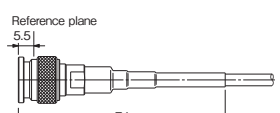
N(m) straight (Code:NMS)

Maximum operating frequency:18.5 GHz / Mass:39g



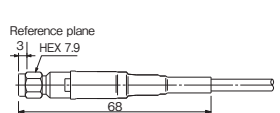
TNC(m) straight (Code:CMS)

Maximum operating frequency:15.0 GHz / Mass:21g



3.5mm(m) straight (Code:DMS)

Maximum operating frequency:18.5 GHz / Mass:13g



* Please see P.82 about "customer-specified swept and right angle connectors".

*The above figures are measured values for reference only.



MWX3 SERIES
MWX 314



Temperature change



Frequency 18.5 GHz



Temperature range -65~+125°C



Minimum bending radius 40 mm



RoHS compliant



Equipment wiring



Listed in the catalogue; manufactured to order



Custom support



Property

Electrical properties

Maximum operating frequency	18.5 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	78 pF/m
Propagation delay (typ.)	3.95 ns/m
Wavelength reduction rate (typ.)	84 %
Higher mode frequency (typ.)	19.0 GHz
VSWR (per connector/ both ends of assy.)	1.182/1.40
Maximum frequency insertion loss(18.5 GHz)	0.8 dB/m

Mechanical properties

Cable outer diameter	7.7 mm
Minimum bending radius (inner side)	40 mm
Maximum tensile strength	294 N(30 kgf)
Cable mass (typ.)	125 g/m
Continuous operating temperature range	-65~+125 °C
Assembly length	200~20,000 mm

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

* See P.67 "Connector combination codes"

Example 1 MWX314

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

Catalog No.
MWX314-01000AMSAMS
a b c

Example 2 MWX314

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

Catalog No.
MWX314-01500NMSNMS
a b c

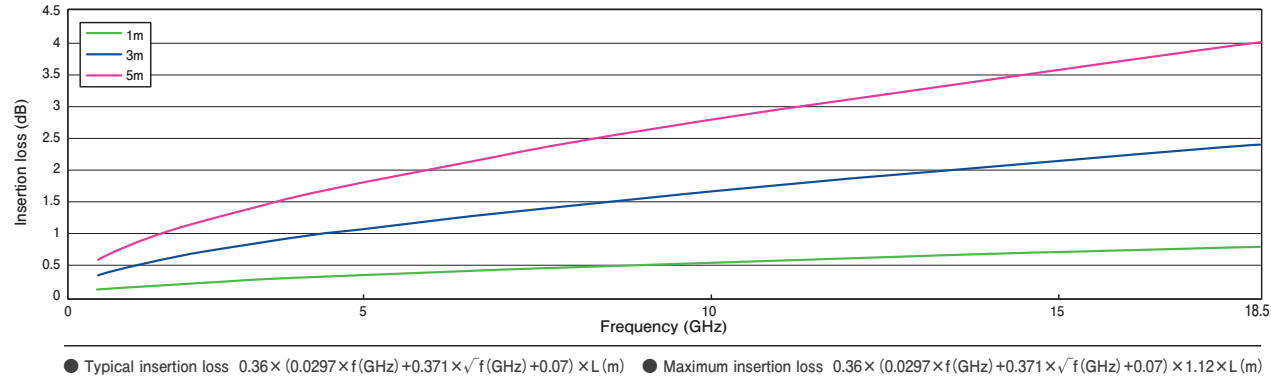
a:Cable
b:Assembly length
c:Connector

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

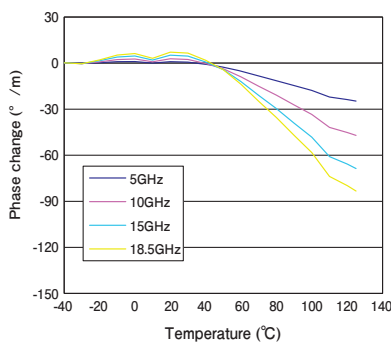
Option

Technical Data

Cable typical insertion loss



MWX314 Phase change vs. temperature

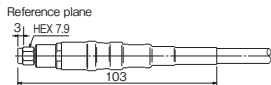


* The cable was measured in chamber every 20 °C from -40 °C, 1 hour after the temperature changed.

Connector

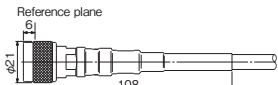
SMA(m) straight (Code:AMS)

Maximum operating frequency:18.5 GHz / Mass:39g



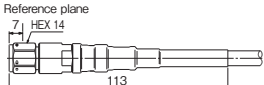
N(m) straight (Code:NMS)

Maximum operating frequency:18.5 GHz / Mass:53g



TNC(m) straight (Code:CMS)

Maximum operating frequency:18.5 GHz / Mass:42g



*The above figures are measured values for reference only.

MWX3 SERIES
MWX 315



Temperature change



Frequency 18.0 GHz



Temperature range -30~+85°C



Minimum bending radius 30~40 mm



RoHS compliant



Equipment wiring



Lightweight Armored (for fixed wiring)



Listed in the catalogue; manufactured to order

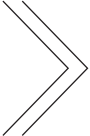


Custom support



Property

Electrical properties		Mechanical properties	Standard type	Lightweight Armored type (for fixed wiring)
Maximum operating frequency	18.0 GHz	Cable outer diameter	8.6 mm	17 mm
Characteristic impedance	50±1 Ω	Minimum bending radius (inner side)	30 mm	40 mm
Capacitance (typ.)	88 pF/m	Cable mass (typ.)	155 g/m	313 g/m
Propagation delay (typ.)	4.3 ns/m	Continuous operating temperature range	-30~+85 ℃	-30~+85 ℃
Wavelength reduction rate (typ.)	77 %	Armored side pressure	—	196 N/cm
Higher mode frequency (typ.)	18.5 GHz	Assembly length	500~5,000 mm	500~5,000 mm
VSWR (per connector/ both ends of assy.)	1.182/1.40			
Maximum frequency insertion loss (18.0 GHz)	0.76 dB/m			



Order form example

Please provide the following information when placing an order.

* See P.67 "Connector combination codes"

Example 1 MWX315

Assembly length: 1 000mm

Connector I : SMA (m) straight

Connector II : SMA (m) straight

Catalog No.

MWX315-01000AMSAMS

a

b

c

Example 2 MWX315 Lightweight Armored type

Assembly length: 1 000mm

Connector I : SMA (m) straight

Connector II : SMA (m) straight

Catalog No.

MWX315-01000AMSAMS/A

a

b

c

d

a: Cable

b: Assembly length

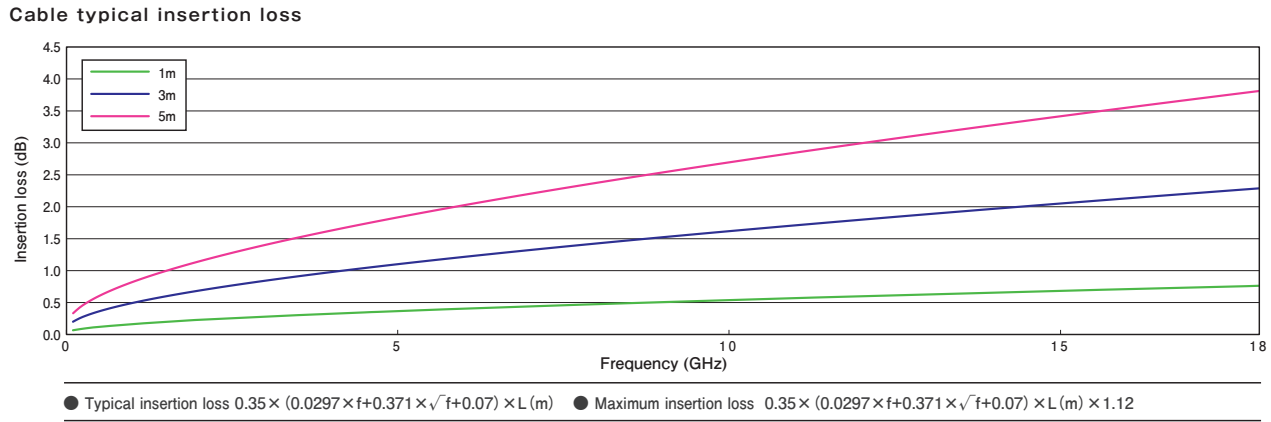
c: Connector

d: Armored

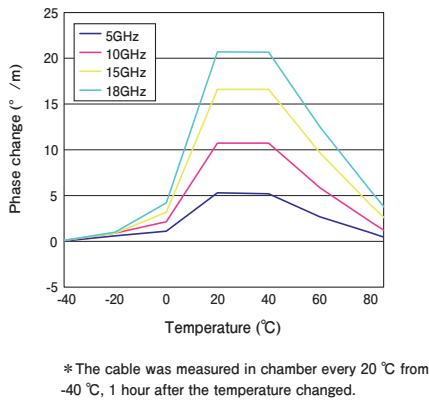
We have the capacity to deliver products with matched phases for customers who require this characteristic.

Option

Technical Data



MWX315 Phase change vs. temperature



Connector

SMA (m) straight (Code:AMS)

Maximum operating frequency:18.0 GHz / Mass:46g

Reference plane

Lightweight type SMA (m) straight (Code:AMS1)

Maximum operating frequency:18.0 GHz / Mass:20g

Reference plane

N (m) straight (Code:NMS)

Maximum operating frequency:18.0 GHz / Mass:61g

Reference plane

Lightweight type N (m) straight (Code:NMS1)

Maximum operating frequency:18.0 GHz / Mass:50g

Reference plane

*The above figures are measured values for reference only.

MWX 3 SERIES
MWX 321



Temperature change



Frequency 26.5 GHz



Temperature range -65~+125°C



Minimum bending radius 30 mm



RoHS compliant



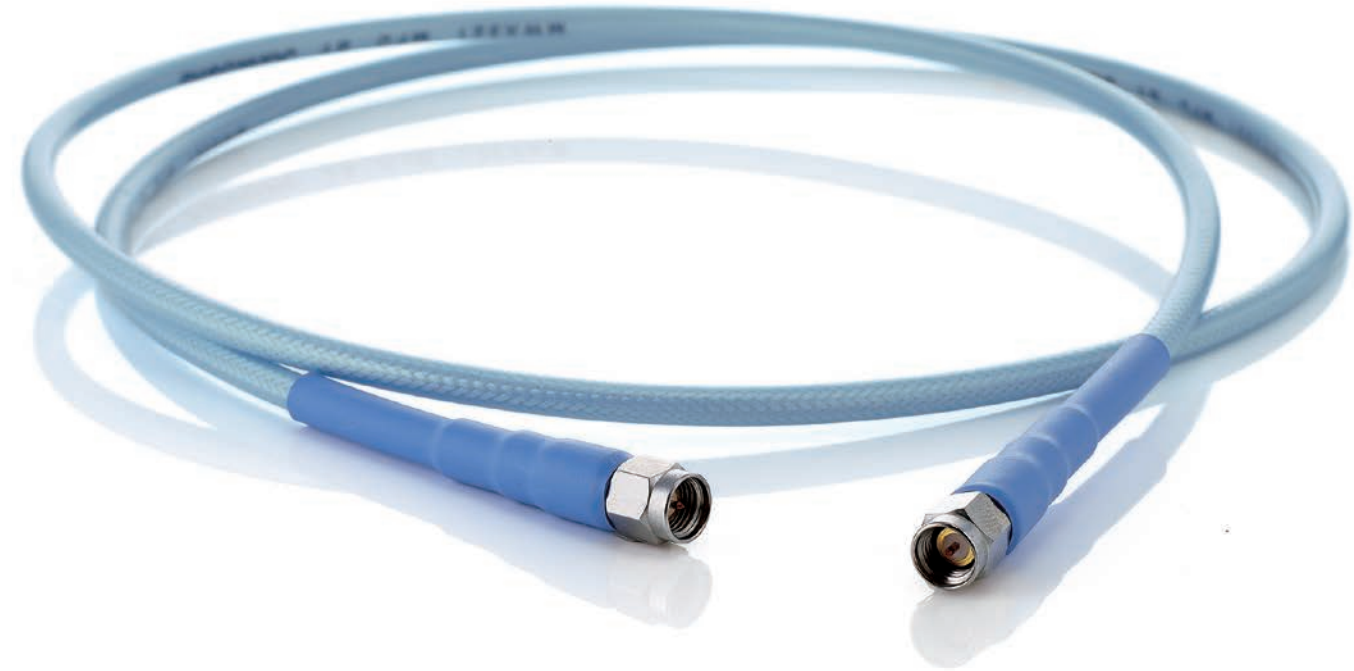
Equipment wiring



Listed in the catalogue; manufactured to order



Custom support



Property

Electrical properties

Maximum operating frequency	26.5 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	80 pF/m
Propagation delay (typ.)	4.05 ns/m
Wavelength reduction rate (typ.)	82 %
Higher mode frequency (typ.)	37.0 GHz
VSWR (per connector/ both ends of assy.)	1.202/1.44
Maximum frequency insertion loss (26.5 GHz)	2.4 dB/m

Mechanical properties

Cable outer diameter	4.7 mm
Minimum bending radius (inner side)	30 mm
Maximum tensile strength	98 N (10 kgf)
Cable mass (typ.)	52 g/m
Continuous operating temperature range	-65~+125 °C
Assembly length	100~20,000 mm

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

* See P.67 "Connector combination codes"

Example 1 MWX321

Assembly length: 1100 mm
Connector I : SMA(m) straight
Connector II : SMA(m) straight

Catalog No.
MWX321-01100AMSAMS
a b c

Example 2 MWX321

Assembly length: 1500mm
Connector I : SMA(m) straight
Connector II : 3.5mm(m) straight

Catalog No.
MWX321-01500AMSDMS
a b c

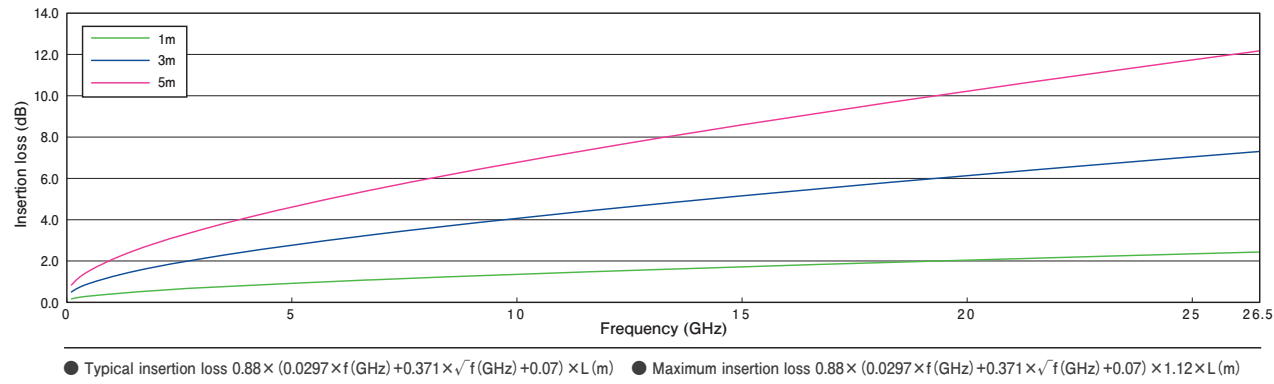
a: Cable
b: Assembly length
c: Connector

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

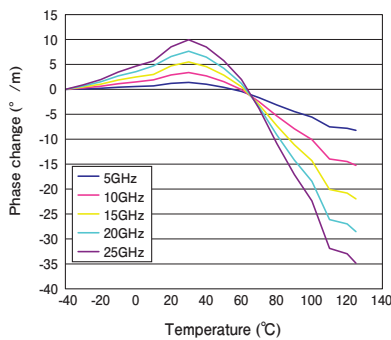
Option

Technical Data

Cable typical insertion loss



MWX321 Phase change vs. temperature



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

Connector

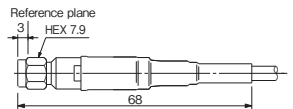
SMA (m) straight (Code:AMS)

Maximum operating frequency:26.5 GHz / Mass:3g



3.5mm (m) straight (Code:DMS)

Maximum operating frequency:26.5 GHz / Mass:13g



*The above figures are measured values for reference only.

M W X 3 S E R I E S
MWX 322



Property

Electrical properties	
Maximum operating frequency	26.5 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	88 pF/m
Propagation delay (typ.)	4.38 ns/m
Wavelength reduction rate (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)	1.3 dB/m

Mechanical properties	Standard type	Armored type	Lightweight Armored type (for fixed wiring)
Cable outer diameter	5.2 mm	12.5 mm	11.0 mm
Minimum bending radius (inner side)	25 mm	25 mm	25 mm
Maximum tensile strength	98 N(10 kgf)	98 N(10 kgf)	98 N(10kgf)
Cable mass (typ.)	60 g/m	208 g/m	155 g/m
Continuous operating temperature range	-65~+125 °C	-30~+85 °C	-30~+85 °C
Armored side pressure	—	196 N/cm	196 N/cm
Assembly length	200~20,000 mm	700~5,000 mm	500~20,000 mm

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

* See P.67 "Connector combination codes"

Example 1
MWX322

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

Catalog No.
MWX322-01000AMSNS
a b c

Example 2
MWX322 Armored type

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

Catalog No.
MWX322-01000DFSDMS/B
a b c d

Example 3
MWX322 Lightweight Armored type

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

Catalog No.
MWX321-01000AMSAMS/A
a b c d

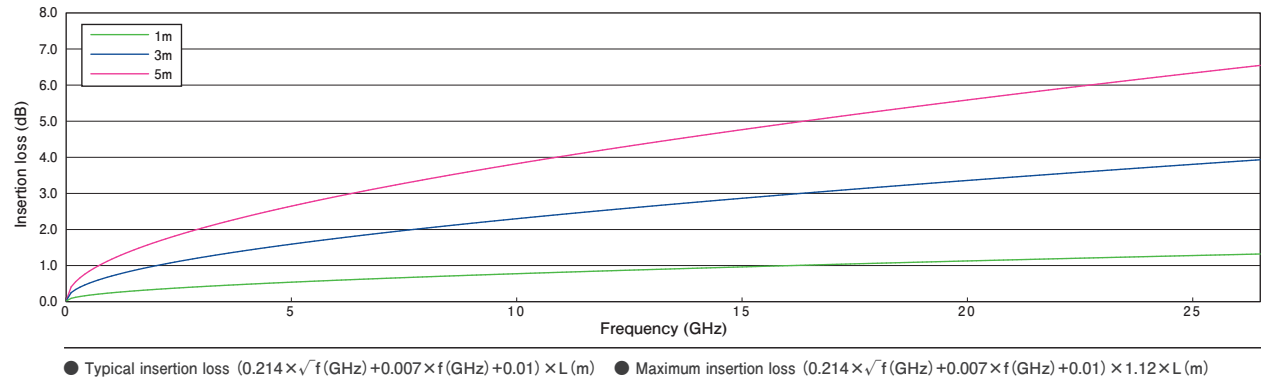
We have the capacity to deliver products with matched phases for customers who require this characteristic.

Option

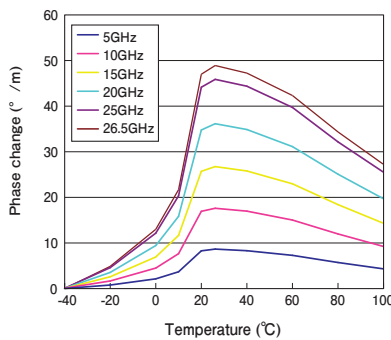
a: Cable c: Connector
b: Assembly length d: Armored

Technical Data

Cable typical insertion loss



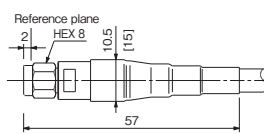
MWX322 Phase change vs. temperature



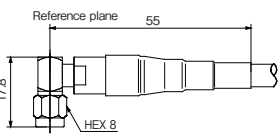
* The cable was measured in chamber every 20 °C from -40 °C, 1 hour after the temperature changed.

Connector

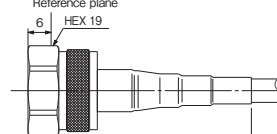
SMA (m) straight (Code:AMS)
Maximum operating frequency:18.5 GHz / Mass:10g



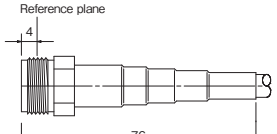
SMA (m) right angle (Code:AMH) (*1) (*2)
Maximum operating frequency:18.0 GHz / Mass:10g



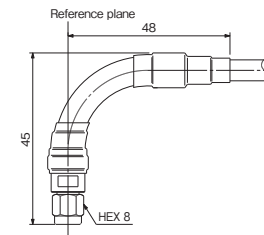
N (m) straight (Code:NMS)
Maximum operating frequency:18.0 GHz / Mass:38g



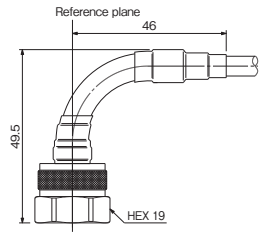
N (f) straight (Code:NFS)
Maximum operating frequency:18.0 GHz / Mass:26g



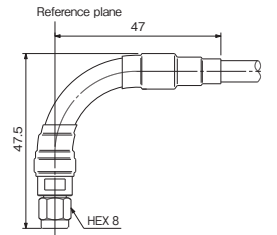
SMA (m) m swept (Code:AMW) (*1) (*2)
Maximum operating frequency:18.5 GHz / Mass:17g



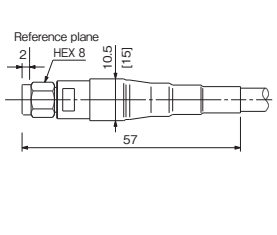
N (m) m swept (Code:NMW) (*1) (*2)
Maximum operating frequency:18.0 GHz / Mass:46g



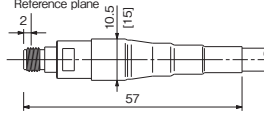
3.5mm (m) m swept (Code:DMW)
Maximum operating frequency:26.5 GHz / Mass:18g



3.5mm (m) straight (Code:DMS)
Maximum operating frequency:26.5 GHz / Mass:11g



3.5mm (f) straight (Code:DFS)
Maximum operating frequency:26.5 GHz / Mass:10g



* Please see P.82 about " customer-specified swept and right angle connectors".
* [] : Armored type size.

*The above figures are measured values for reference only.

M W X 3 S E R I E S

MWX 341



Temperature change



Frequency 40.0 GHz



Temperature range -65~+125°C



Minimum bending radius 20 mm



RoHS compliant



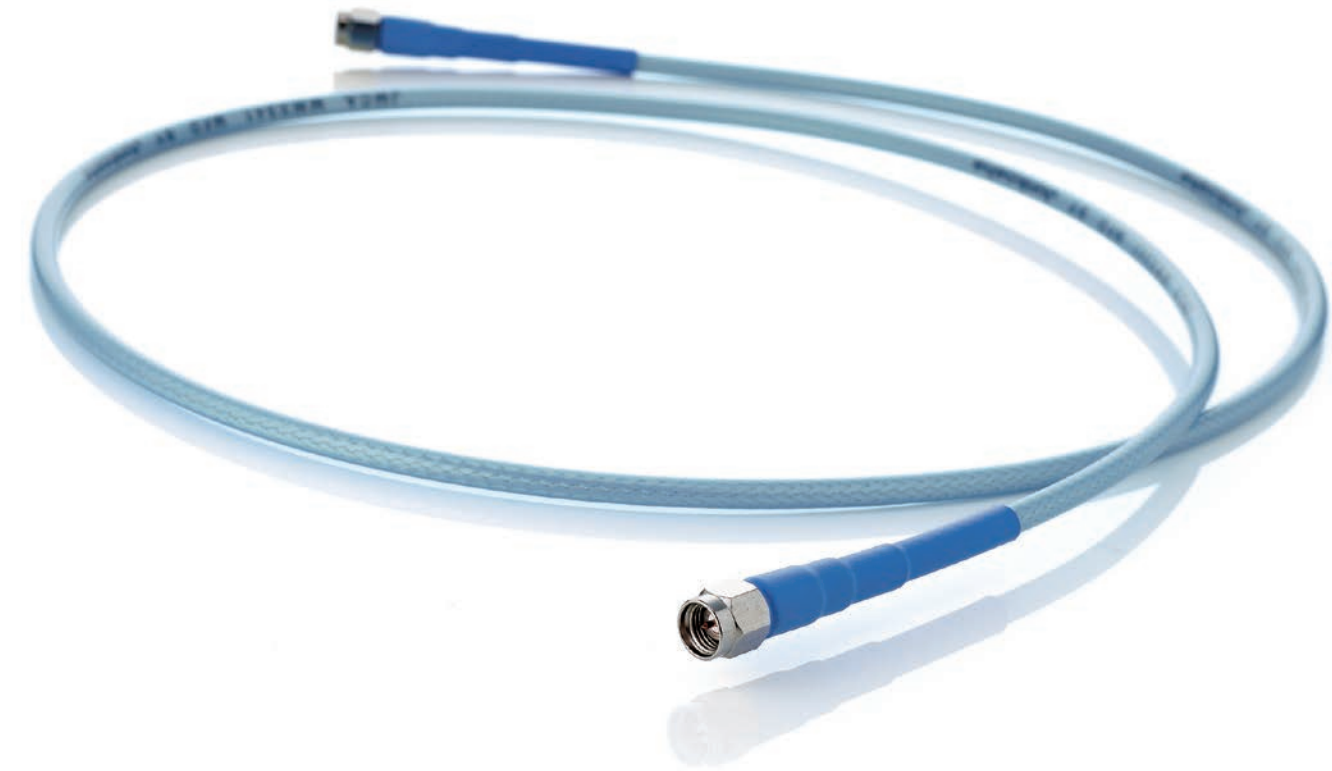
Equipment wiring



Listed in the catalogue; manufactured to order



Custom support



Property

Electrical properties

Maximum operating frequency	40.0 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	80 pF/m
Propagation delay (typ.)	4.05 ns/m
Wavelength reduction rate (typ.)	82 %
Higher mode frequency (typ.)	46.0 GHz
VSWR (per connector/ both ends of assy.)	1.197/1.44
Maximum frequency insertion loss (40.0 GHz)	3.3 dB/m

Mechanical properties

Cable outer diameter	4.0 mm
Minimum bending radius (inner side)	20 mm
Maximum tensile strength	98 N (10 kgf)
Cable mass (typ.)	40 g/m
Continuous operating temperature range	-65~+125 °C
Assembly length	100~10,000 mm

Order form example

Please provide the following information when placing an order.

* See P.67 "Connector combination codes"

Example 1 MWX341

Assembly length: 1200 mm
Connector I : SMA(m) straight
Connector II : SMA(m) straight

Catalog No.
MWX341-01200AMSAMS

a

b

c

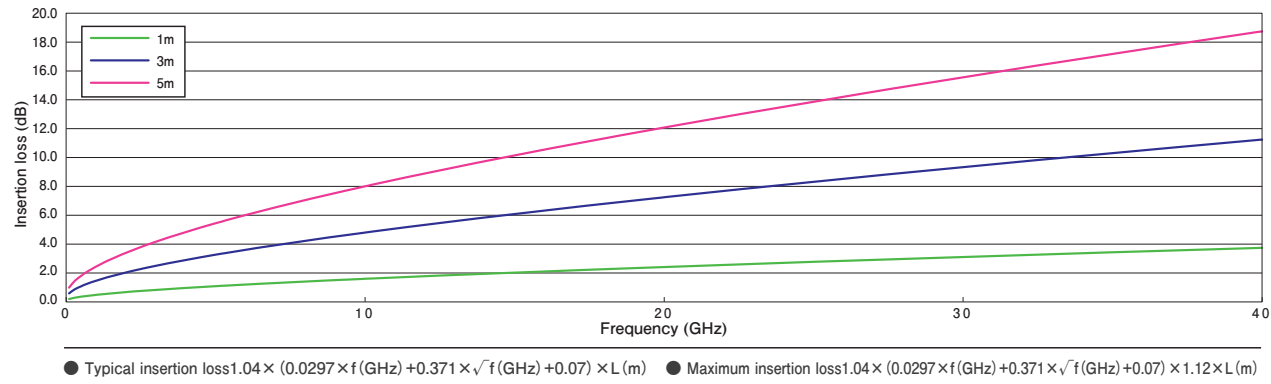
a: Cable
b: Assembly length
c: Connector

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

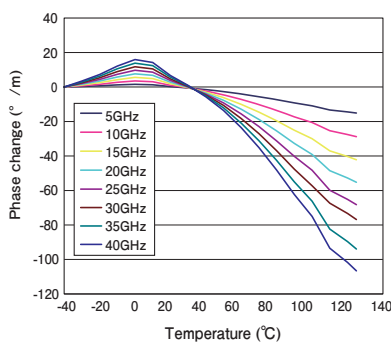
Option

Technical Data

Cable typical insertion loss



MWX341 Phase change vs. temperature

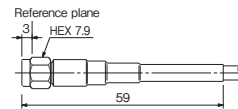


* The cable was measured in chamber every 20 °C from -40 °C, 1 hour after the temperature changed.

Connector

SMA(m) straight (Code:AMS)

Maximum operating frequency: 40.0 GHz / Mass: 3g



*The above figures are measured values for reference only.



MWX 3 SERIES
MWX 342



Temperature change



Frequency 40.0 GHz



Temperature range -65~+125°C



Minimum bending radius 20 mm



RoHS compliant



Equipment wiring



Armored



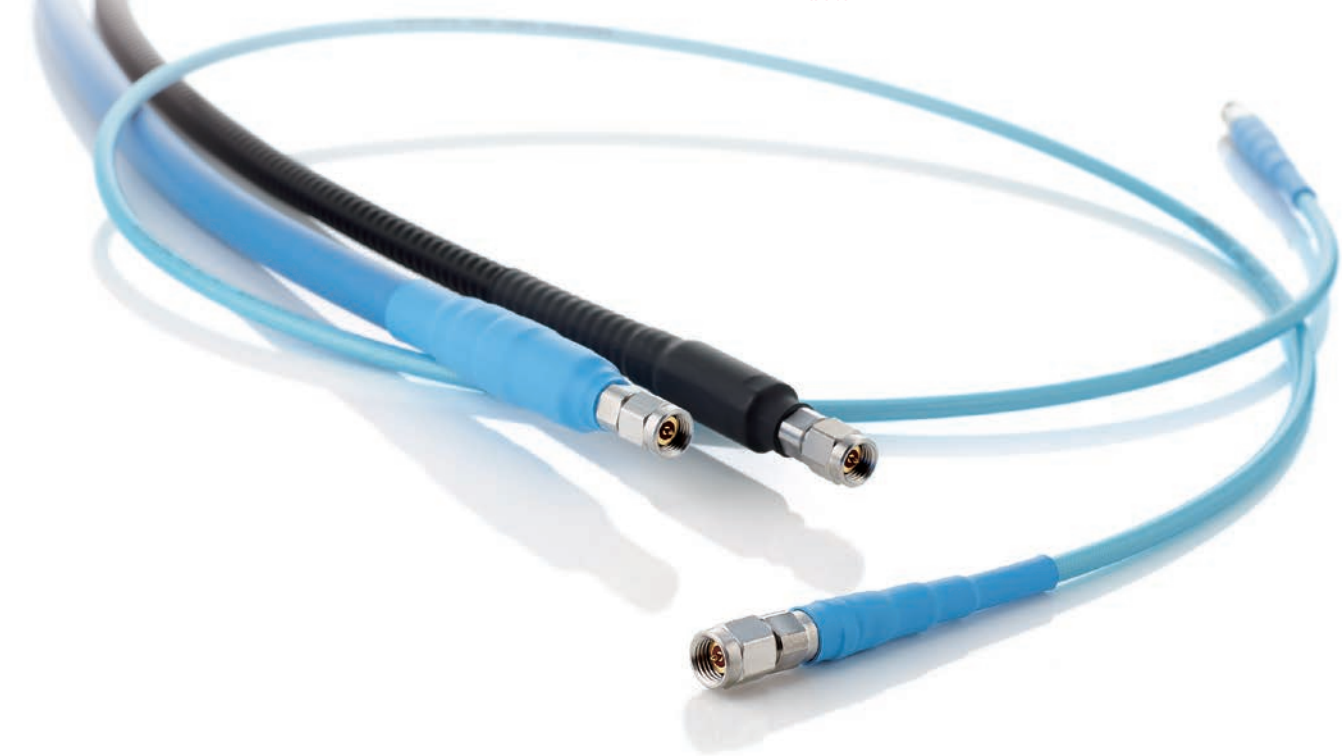
Lightweight Armored (for fixed wiring)



Listed in the catalogue; manufactured to order



Custom support



Property

Electrical properties

Maximum operating frequency	40.0 GHz
Characteristic impedance	50±1 Ω
Capacitance (typ.)	87 pF/m
Propagation delay (typ.)	4.35 ns/m
Wavelength reduction rate (typ.)	76 %
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)	2.4 dB/m

Mechanical properties

	Standard type	Armored type	Lightweight Armored type (for fixed wiring)
Cable outer diameter	3.9 mm	9.5 mm	8.0 mm
Minimum bending radius (inner side)	20 mm	20 mm	20 mm
Maximum tensile strength	98 N(10 kgf)	98 N(10 kgf)	98 N(10kgf)
Cable mass (typ.)	35 g/m	137 g/m	98 g/m
Continuous operating temperature range	-65~+125 °C	-30~+85 °C	-30~+85°C
Armored side pressure	—	196 N/cm	196 N/cm
Assembly length	200~10,000 mm	700~10,000 mm	500~10,000 mm

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

* See P.67 "Connector combination codes"

Example 1
MWX342

Assembly length: 1000 mm
Connector I : 2.92mm (f) straight
Connector II : 2.92mm (m) straight

Catalog No.
MWX342-01000KFSKMS
a b c

Example 2
MWX342 Armored type

Assembly length: 1000mm
Connector I : 2.4mm (f) straight
Connector II : 2.4mm (m) straight

Catalog No.
MWX342-01000LFLSLS/B
a b c d

Example 3
MWX342 Lightweight Armored type

Assembly length: 1000mm
Connector I : 2.92mm (m) straight
Connector II : 2.92mm (m) straight

Catalog No.
MWX342-01000KMSKMS/A
a b c d

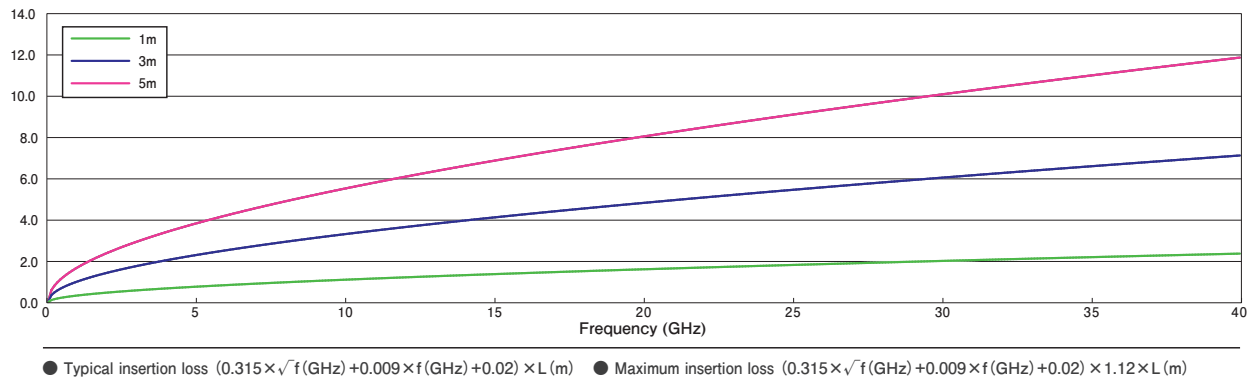
We have the capacity to deliver products with matched phases for customers who require this characteristic.

Option

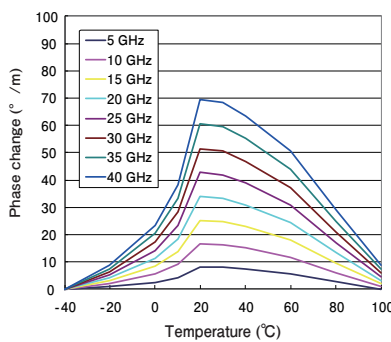
a: Cable c: Connector
b: Assembly length d: Armored

Technical Data

Cable typical insertion loss



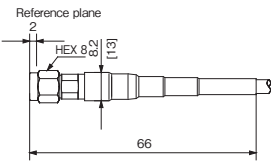
MWX342 Phase change vs. temperature



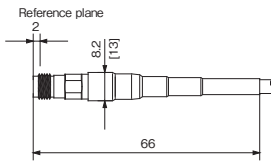
* The cable was measured in chamber every 20 °C from -40 °C, 1 hour after the temperature changed.

Connector

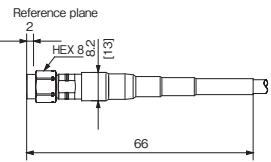
2.92mm (m) straight (Code:KMS)
Maximum operating frequency:40.0 GHz / Mass:6g



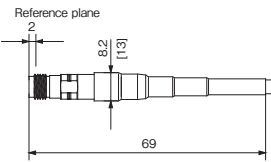
2.92mm (f) straight (Code:KFS)
Maximum operating frequency:40.0 GHz / Mass:5g



2.4mm (m) straight (Code:LMS)
Maximum operating frequency:40.0 GHz / Mass:6g



2.4mm (f) straight (Code:LFS)
Maximum operating frequency:40.0 GHz / Mass:6g



• [] : Armored type size.

*The above figures are measured values for reference only.

MWX3 SERIES

Placing orders



ex.1

Cable : **MWX312**

Assembly length : **1500 mm**

Connector I : **SMA (f) Straight**

Connector II : **SMA (m) Straight**

Catalog number

MWX312-01500 AFS AMS

The unit of assembly length is mm. Shown as a five-digit number. If the number consists of fewer than five digits, remember to add zero (s) to the left of the first digit to make it five digits. The assembly length is measured based on the reference planes, not on the connector ends, shown at the figure to the left.

ex.2

Cable : **MWX322**

Assembly length : **1000 mm**

Connector I : **3.5mm (f) Straight**

Connector II : **3.5mm (m) Straight**

Armored : **Armored type**

Catalog number

MWX322-01000 DFS DMS /B

Armored-type cables will have "a" /"B" appended to the connector combination code.

ex.3

Cable : **MWX342**

Assembly length : **1000mm**

Connector I : **2.92mm (m) Straight**

Connector II : **2.92mm (m) Straight**

Armored : **Light weight armored type**

Catalog number

MWX342-01000 KMS KMS /A

Lightweight armored-type cables will have "a" /"A" appended to the connector combination code.

Connector combination codes

Connector I \ Connector II	SMA		SMA Lightweight type	SMA	SMA right angle	SMA right angle (18.0GHz type)	SSMA	N	N Light weight type	TNC	3.5mm	3.5mm	2.92mm	2.92mm	2.4mm	2.4mm
	m	f	m	f	m	m	m	m	m	m	m	f	m	f	m	f
AMS	AMS1	AFS	AMR	AMH	SMS	NMS	NMS1	CMS	DMS	DFS	KMS	KFS	LMS	LFS		
SMA	m	AMS	AMSAMS	AMSAMS1	AFSAMS	AMRAMS	AMHAMH	AMSSMS	AMSNMS	AMSNMS1	AMSCMS	AMSDMS	AMSDFS	—	—	—
SMA Lightweight type	m	AMS1	—	AMS1AMS1	—	—	—	—	AMSNMS1	AMSNMS1	—	—	—	—	—	—
SMA	f	AFS	—	—	AFSAFS	AFSAMR	AFSAMH	AFSSMS	AFSNMS	—	AFSCMS	AFSDMS	—	—	—	—
SMA right angle	m	AMR	—	—	—	AMRAMR	AMHAMR	AMRSMS	AMRNMS	—	AMRCMS	AMRDMS	—	—	—	—
SMA right angle (18.0GHz type)	m	AMH	—	—	—	—	AMHAMH	—	AMHNMS	—	AMHCMS	—	—	—	—	—
SSMA	m	SMS	—	—	—	—	—	SMSSMS	—	—	—	—	—	—	—	—
N	m	NMS	—	—	—	—	—	—	NMSNMS	NMSNMS1	CMSNMS	DMSNMS	DFSNMS	—	—	—
N Light weight type	m	NMS1	—	—	—	—	—	—	—	NMS1NMS1	—	—	—	—	—	—
TNC	m	CMS	—	—	—	—	—	—	—	—	CMSCMS	CMSDMS	—	—	—	—
3.5mm	m	DMS	—	—	—	—	—	—	—	—	—	DMSDMS	DFSDMS	—	—	—
3.5mm	f	DFS	—	—	—	—	—	—	—	—	—	—	DFSDFS	—	—	—
2.92mm	m	KMS	—	—	—	—	—	—	—	—	—	—	—	KMSKMS	KFSKMS	KMSLMS
2.92mm	f	KFS	—	—	—	—	—	—	—	—	—	—	—	—	KFSKFS	KFSLMS
2.4mm	m	LMS	—	—	—	—	—	—	—	—	—	—	—	—	—	LMSLMS
2.4mm	f	LFS	—	—	—	—	—	—	—	—	—	—	—	—	—	LFSLFS

m : male (plug)
f : female (jack)

Please provide a catalog number when placing an order.