

N Series

N Type Coaxial Connectors



RF



MIL Standard



Wide Variation



Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (8352)28-53-07
Чепелевск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

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Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

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Features

1. 50Ω Impedance Matching Type, Coaxial Connector

This N series is a medium-sized coaxial connector with 50Ω impedance matching type.

It is robust, highly reliable, and has been used in defense communications, and measuring equipment.

It is not compatible with 75Ω impedance matching NC type or NTT specifications S type.

2. Highly Impedance Matching (Up to 10GHz)

Frequency is available up to 10GHz.

3. Applicable Standards

MIL-C-39012
IEC 60169-16
JIS C 5411

Product Specifications

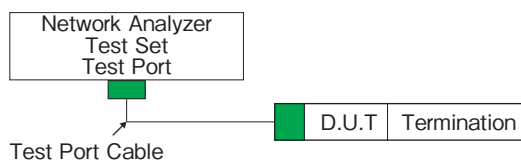
Nominal Characteristic Impedance (Note)	50 Ω	Operating Temperature	-30 to +60°C
Frequency Range	0 to 10GHz	Operating Relative Humidity	95% Max.

Note: When used in low frequency (up to about 0 to 200 MHz), there is no particular difference in electrical performance between a 75 Ω cable and a 50 Ω cable.

Items	Specifications	Conditions
Contact Resistance	3m Ω Max.	Measured at 100mA DC
Insulation Resistance	1000M Ω Min.	Measured at 500V DC
Withstanding Voltage	No insulation breakdown	1500V AC for 1 min.
V.S.W.R.*	1.2 Max.	Up to 2GHz
Female Contact Retention Force	1N Min.	Measured with ϕ 1.6 pin gauge
Mating Durability	Contact Resistance : 10m Ω Min.	500 times
Vibration Resistance	No electrical discontinuity of 1 μ s or more No damage, cracks, or parts dislocation	Frequency : 10 to 500Hz, Total amplitude : 1.5mm, Acceleration : 98m/s ² , 10 cycles in each of the 3 axes direction
Shock	No electrical discontinuity of 1 μ s or more No damage, cracks, or parts dislocation	Acceleration : 490m/s ² , Duration : 11ms, Sine half-wave waveform, 3 cycles in each of the 3 axes direction
Humidity	No damage, cracks, or parts dislocation	Temperature : +25°C to +65°C Humidity : 80 to 96% , Left for 240hours
Temperature Cycle	No damage, cracks, or parts dislocation	(-55°C : 30 min. $\rightarrow$ 5 to 35°C : within 5 min. $\rightarrow$ 85°C : 30 min. $\rightarrow$ 5 to 35°C : within 5 min.) 5 cycles
Corrosion Resistance	No corrosion that impairs function	Continuous 48 hour cycle in 5% salt water solution

Note : Information contained in this catalog represents general requirements for this Series.
Contact us for the drawings and specifications for a specific part number shown.

*The above V.S.W.R. specification values were measured using the measurement system shown below.



Note1: The cable connector is measured with the connector attached to the applicable cable (10cm).
Note2: The board connector is measured with the connector attached to a 50 Ω board.

Materials / Finish

Component	Material	Finish (Note)	Remarks
Shell	Brass	Silver Plating Nickel Plating	-
Male Contact	Brass	Silver Plating Gold Plating	-
Female Contact	Beryllium Copper	Silver Plating Gold Plating	-
Insulator	PTFE	-	Noncombustible
Rubber Gasket	Silicone Rubber	-	Noncombustible

Note: Silver plating combines with sulfur in the air to form silver sulfide, which discolors, but does not affect its properties.

About Discoloration of Silver Plating

The discoloration is only on the surface and the contact area is wiped so there is no problem with electrical contact.

Product Number Structure

Refer to the chart below when determining the product specifications from the product number.

Standard Product

N - P - 5DV

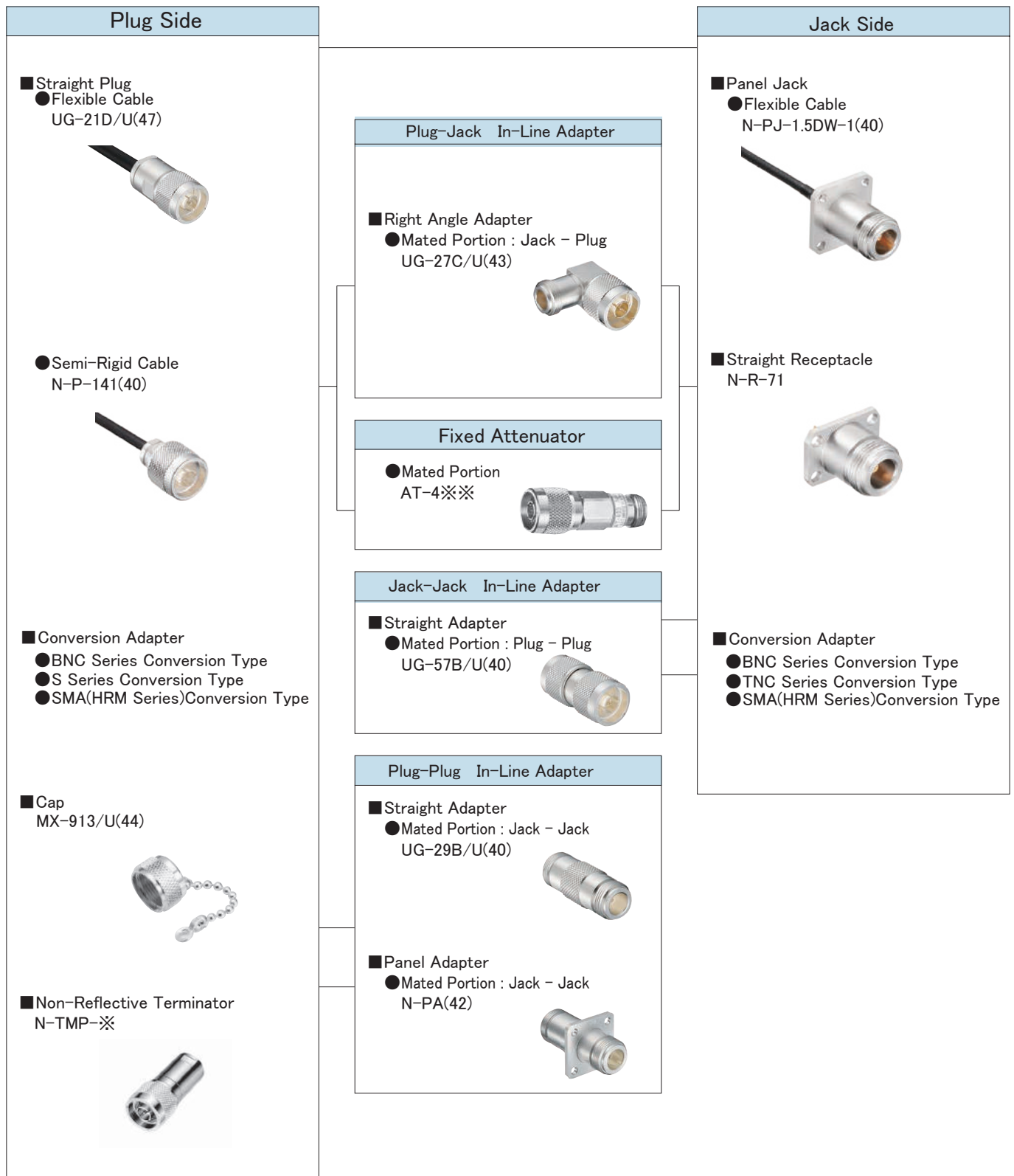
1	2	3
1 Series Name	N	3 Cable Type
2 Connector Type	P : Plug PR : Plug Receptacle PJ : Panel Jack PA : Panel Adapter	

MIL Applicable Product

UG - 21 D / U

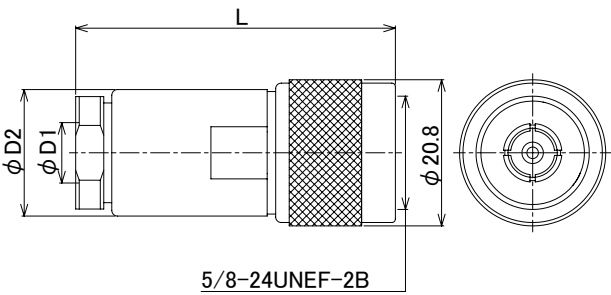
1	2	3	1
1 Symbol for High Frequency Coaxial Connectors	UG	3 Improvement Symbol	
2 Identification No.			

Functional Diagram



Straight Plug

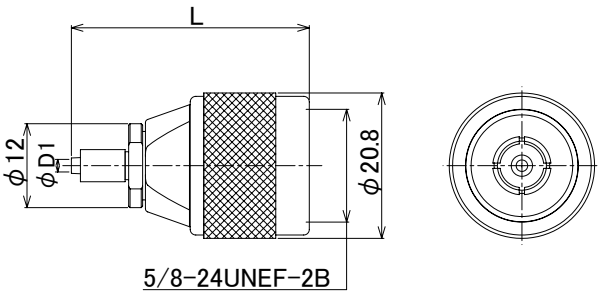
●Flexible Cable



Unit : mm

Part No.	HRS No.	Applicable Cable	$\phi D1$	$\phi D2$	L	Purchase Unit
UG-21D/U(47)	CL0301-0003-0-47	RG-8/U, RG-9/U	11.1	19	38	20pcs per bag
N-P-5DV(40)	CL0301-0120-3-40	5D-2V	8.6	18	45.5	5pcs per bag

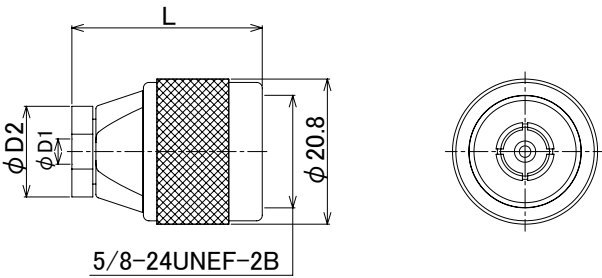
●Flexible Cable (Small-Diameter Cable)



Unit : mm

Part No.	HRS No.	Applicable Cable	$\phi D1$	L	Purchase Unit
N-P-1.5DQS(40)	CL0301-0267-1-40	1.5D-Q.SUPER	1.8	34.05	20pcs per bag
N-P-2.5DQS(40)	CL0301-0276-2-40	2.5D-Q.SUPER	2.9	35.6	
N-P-1.5DW	CL0301-0320-2-00	1.5D-2W	1.8	34.05	

●Semi-Rigid Cable

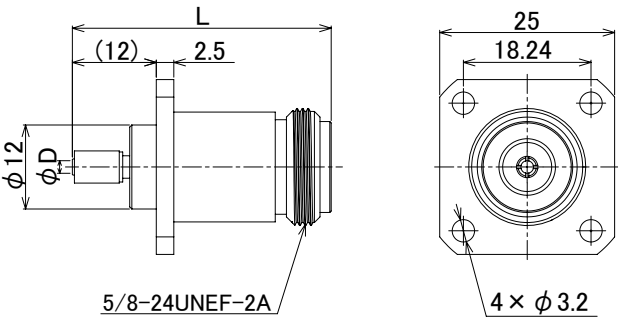


Unit : mm

Part No.	HRS No.	Applicable Cable	$\phi D1$	$\phi D2$	L	Purchase Unit
N-P-141(40)	CL0301-0162-3-40	UT-141A	3.63	13	27.3	5pcs per bag
N-P-141-2(A)(40)	CL0301-0262-8-40	UT-141A	3.64	5	25.7	

Panel Jack

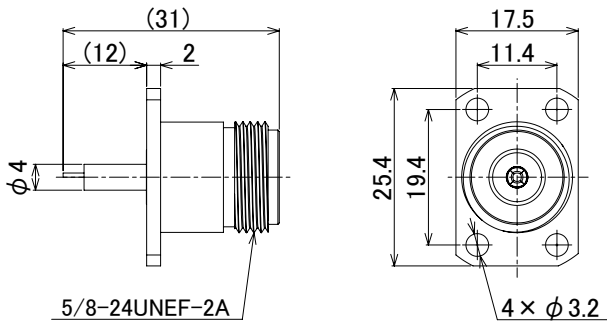
●Flexible Cable



Unit : mm

Part No.	HRS No.	Applicable Cable	ϕD	L	Purchase Unit
N-WPJ-2.5DW(40)	CL0301-0298-5-40	2.5D-HQEW	2.85	40.2	5pcs per bag
N-WPJ-1.5DW-1(40)	CL0301-0306-1-40	1.5D-HQEW	1.8	37	20pcs per bag
N-PJ-1.5DW-1(40)	CL0301-0312-4-40	1.5D-HQEW	1.8	37	10pcs per bag

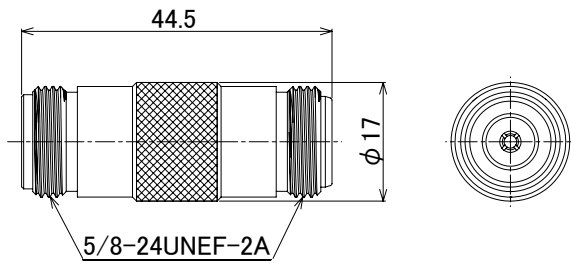
Receptacle



Part No.	HRS No.	Purchase Unit
N-R-71	CL0301-0014-0-00	50pcs per tray

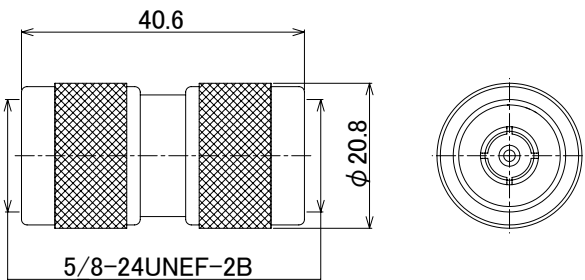
Adapter

●Straight Adapter (Mated Portion : Jack - Jack)



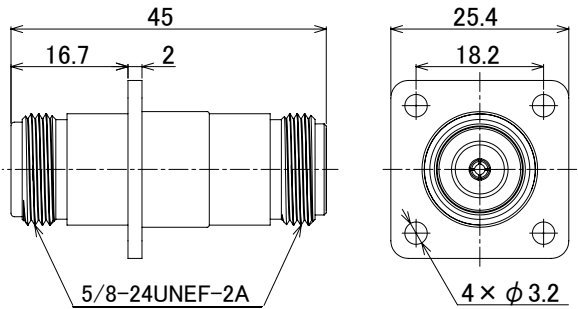
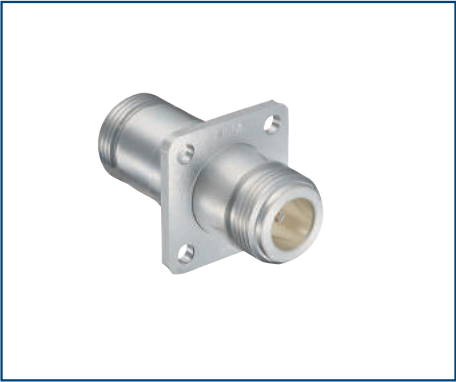
Part No.	HRS No.	Purchase Unit
UG-29B/U(45)	CL0301-0035-6-45	5pcs per bag

●Straight Adapter (Mated Portion : Plug - Plug)



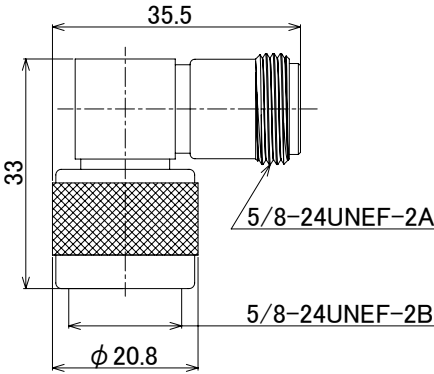
Part No.	HRS No.	Purchase Unit
UG-57B/U(40)	CL0301-0018-7-40	5pcs per bag

●Panel Adapter (Mated Portion : Jack - Jack)



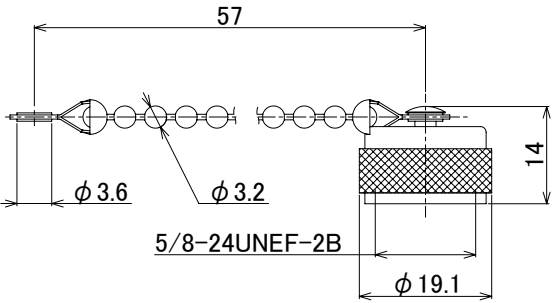
Part No.	HRS No.	Purchase Unit
N-PA(42)	CL0301-0036-9-42	5pcs per bag

●Right Angle Adapter (Mated Portion : Plug - Jack)



Part No.	HRS No.	Purchase Unit
UG-27C/U(43)	CL0301-0015-9-43	5pcs per bag

Cap



Part No.	HRS No.	Purchase Unit
MX-913/U(44)	CL0301-0020-9-44	5pcs per bag

Conversion Adapter List

For external dimensions, please refer to "Conversion Adapter".

Mated Part1		Mated Part2		Part No.	HRS No.	Purchase Unit
Series Name	Mated Portion	Series Name	Mated Portion			
N	Plug	BNC	Jack	JUG-201A/U(40)	CL0311-0007-8-40	5pcs per bag
		S	Jack	N.P-S.J(40)	CL0311-0245-6-40	20pcs per bag
		SMA (HRM)	Plug	HRM-555S(40)	CL0311-0125-4-40	5pcs per bag
			Jack	HRM-554S(40)	CL0311-0123-9-40	
	Jack	SMA (HRM)	Plug	HRM-553S	CL0311-0121-3-00	
				HRM-557SV	CL0311-0272-9-00	
			Jack	HRM-552S	CL0311-0119-1-00	
				HRM-556SV	CL0311-0298-2-00	

N-TM Series

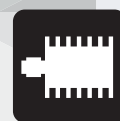
N Type Coaxial Connectors Non-Reflective Terminator



RF



MIL Standard



Terminator



Product Number Structure

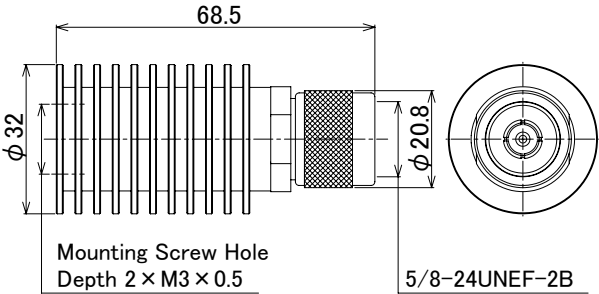
Refer to the chart below when determining the product specifications from the product number.

N - TM P - 5 - (40)

12345

1 Series Name	N	4 Power	5 : 5W
2 TM	Terminator	5 Specification No.	40 : RoHS Compliant
3 Connector Type	P : Plug		

Non-Reflective Terminator



Part No.	HRS No.	Frequency (GHz)	V.S.W.R. (Max)		Power (W)	Purchase Unit
			0 to 2GHz	2 to 6GHz		
N-TMP-5(40)	CL0353-0033-0-40	0 to 6	1.15	1.20	5	20pcs per bag

N-AT Series

N Type Coaxial Connectors Attenuator



RF



MIL Standard



Attenuator



Product Number Structure

Refer to the chart below when determining the product specifications from the product number.

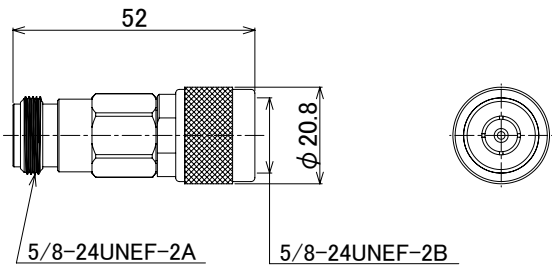
AT - 4 01 (40)

1 2 3 4

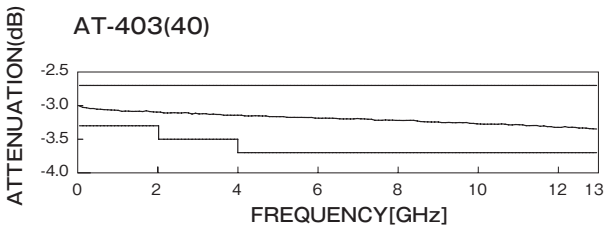
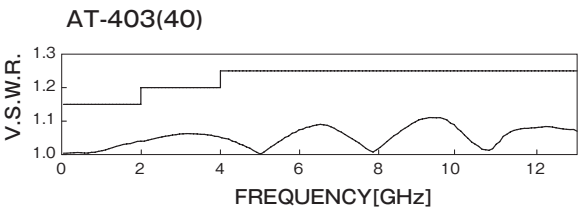
1 AT	Attenuator	3 Attenuation (dB)	01 : 1dB 10 : 10dB
2 Series Name (Mated Portion)	4 : N Plug - Jack 11 : N Plug - Jack (High Power Type)	4 Specification No.	40 : RoHS Compliant

Fixed Attenuator

●Mated Portion : Plug - Jack

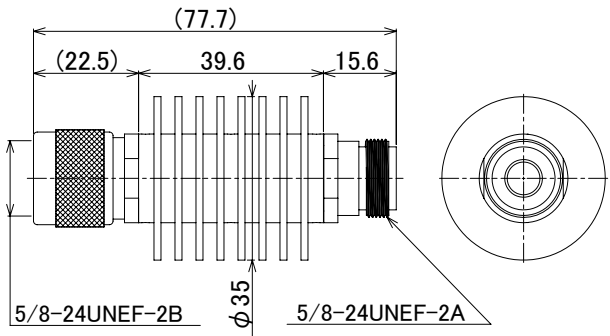


Part No.	HRS No.	Frequency (GHz)	V.S.W.R. (Max)			Attenuation(dB)			Power (W)	Purchase Unit
			0 to 2GHz	2 to 4GHz	4 to 13GHz	0 to 2GHz	2 to 4GHz	4 to 13GHz		
AT-401(40)	CL0354-0081-9-40	0 to 13	1.15	1.20	1.25	1 ± 0.3	1 ^{+0.5} _{-0.3}	1 ^{+0.6} _{-0.3}	2	10pcs per bag
AT-402(40)	CL0354-0082-1-40					2 ± 0.3	2 ^{+0.5} _{-0.3}	2 ^{+0.6} _{-0.3}		
AT-403(40)	CL0354-0033-6-40					3 ± 0.3	3 ^{+0.5} _{-0.3}	3 ^{+0.7} _{-0.3}		
AT-410(40)	CL0354-0035-1-40					10 ± 0.5	10 ^{+0.8} _{-0.5}	10 ^{+1.0} _{-0.5}		
AT-420(40)	CL0354-0036-4-40					20 ± 0.5	20 ^{+0.8} _{-0.5}	20 ^{+1.2} _{-0.7}		



High-Power Fixed Attenuator (Single Item, Heat Radiating Type)

●Mated Portion : Plug - Jack



Part No.	HRS No.	Frequency (GHz)	V.S.W.R. (Max)	Attenuation (dB)	Power (W)	Purchase Unit
AT-1103(40)	CL0354-0070-2-40	0 to 8	1.3	3 ± 0.5	10	1pc per bag
AT-1106(40)	CL0354-0071-5-40			6 ± 0.7		
AT-1110(40)	CL0354-0072-8-40			10 ± 1.0		
AT-1120(40)	CL0354-0073-0-40			20 ± 1.2		

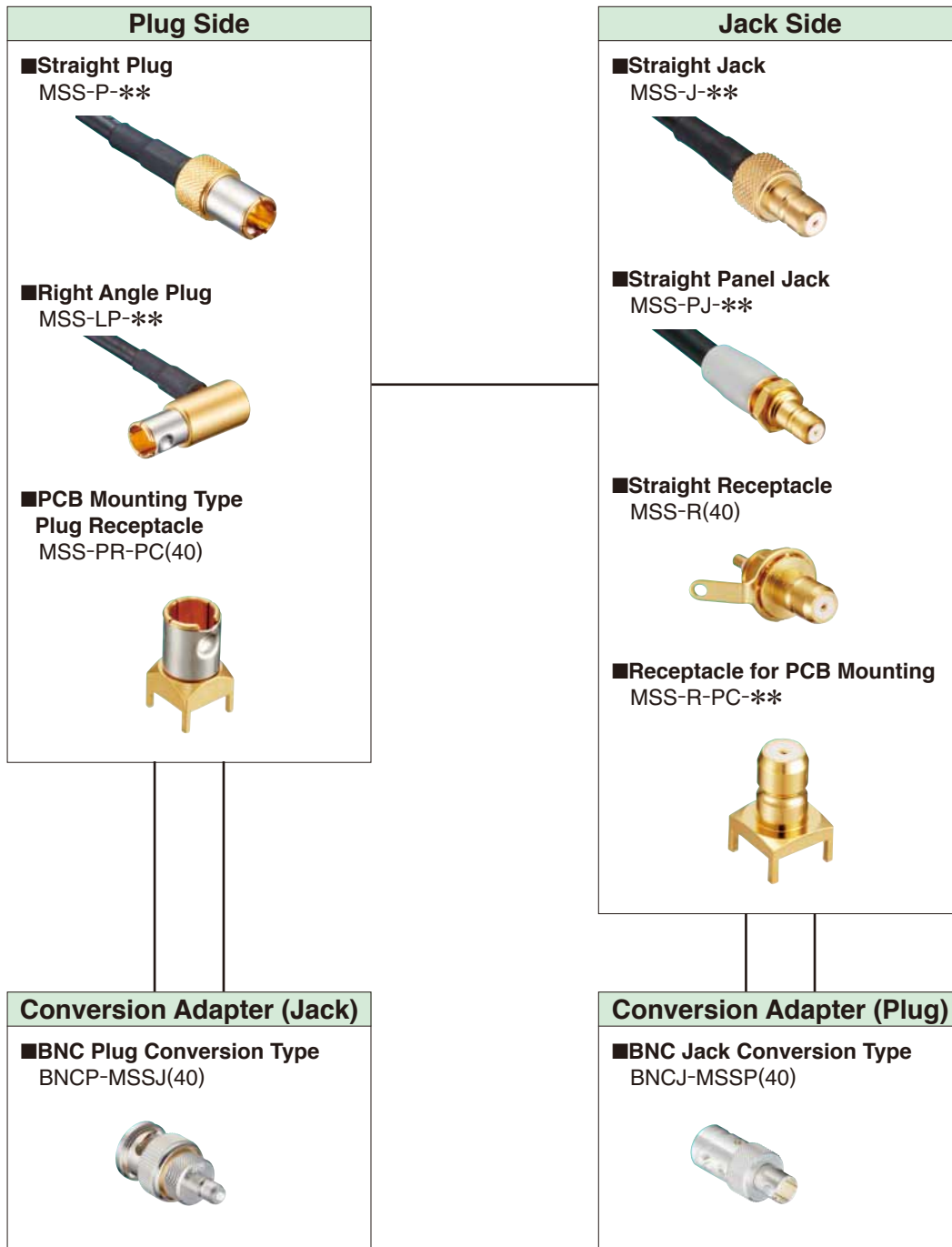
Note: This product contains Beryllia. When disposing of the product, follow the relevant laws and regulations.

Ultra Small Push-On Type Connector

MSS Series



Functional Diagram



Features

1. 50Ω Impedance Matching Type, Coaxial Connector

This MSS series is a 50-matching push-on-lock engagement connector.

2. Applicable Standards

It has high reliability and was established in the specification of Defense Ministry "DSP C 6206 (abolished in 2001)".

3. RoHS2 Compliant

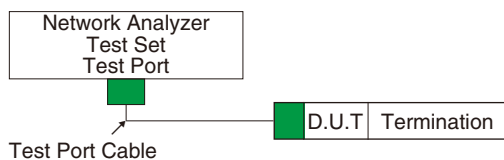
Product Specifications

Rated Value	Nominal Characteristic Impedance Rated Voltage Rated Frequency	50Ω 150Vrms AC DC to 1GHz	Operating Temperature Relative Humidity	-40 to +85 85% Max.
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Item	Specifications	Conditions
1. Contact Resistance	5mΩ Max.	Measured at a maximum of 100mA DC.
2. Insulation Resistance	2000MΩ Min.	Measured at 500V DC.
3. Withstanding Voltage	No dielectric breakdown.	500V AC for 1 min.
4. V.S.W.R. (*)	1.2 Max.	Up to 1GHz
5. Mating Force (Extraction Force)	9.8 to 44N	Measured with compatible connector
6. Mating Durability	Contact Resistance : 10mΩ Max.	3,000 times
7. Moisture Resistance	Insulation Resistance : 100MΩ Min. (at high temperatures) Insulation Resistance : 2000MΩ Min. (when dry) No damage, cracks or loosened parts.	Temperature : +25 to +65°C Humidity : 90-96% Left for 10 cycles (240 hours)
8. Corrosion Resistance	No corrosion that impairs function.	Left in 5% salt water solution for 48 consecutive hours

*V.S.W.R. Measurement System

The specified V.S.W.R. values were measured using the following measuring system shown in the figure below:



Note 1 : The cable connector is measured with the connector attached to the applicable cable at 10cm from both ends.

Note 2 : Board connectors are measured with the connector attached to a 50Ω PCB.

*Some products may have different specifications from those shown above.

Materials / Finish

Part	Material	Finish	UL Regulation
Shell	Brass	Gold Plating	_____
Male Contact	Brass	Gold Plating	_____
Female Contact	Beryllium Copper	Gold Plating	_____
Insulator	PTFE Resin	_____	Flame Retardant
Lock Spring	Beryllium Copper	Nickel Plating	_____

Product Number Structure

Refer to the chart below when determining the product specifications from the product number.

Please select from the product numbers listed in this catalog when placing orders.

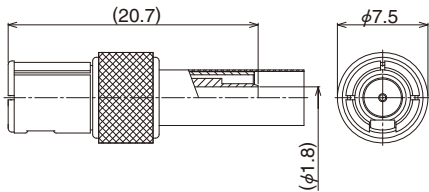
MSS -

① ② ③

① Series Name	③ 1) Applicable Cable for Plug/ Jack 1.5DV : 1.5D-2V 2.5 : 2.5D-2V 2) Mounting Style for Receptacle or Plug Receptacle PC : PCB Mounting Type
② Connector Type P : Straight Plug LP : Right Angle Plug J : Straight Jack PJ : Panel Jack R : Straight Receptacle LR : Right Angle Receptacle PR : Plug Receptacle	

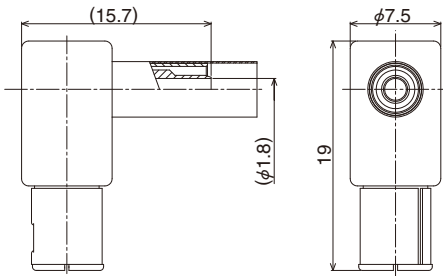
■Plug

●Straight Plug



Part No.	HRS No.	Applicable Cable	Purchase Unit
MSS-P-1.5DV	319-0002-0 00	1.5D-2V	20pcs per bag

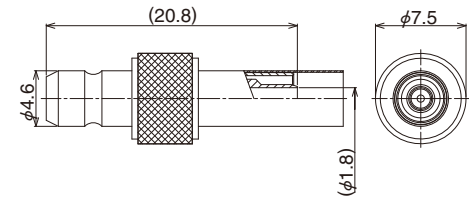
●Right Angle Plug



Part No.	HRS No.	Applicable Cable	Purchase Unit
MSS-LP-1.5DV	319-0064-0 00	1.5D-2V	20pcs per bag

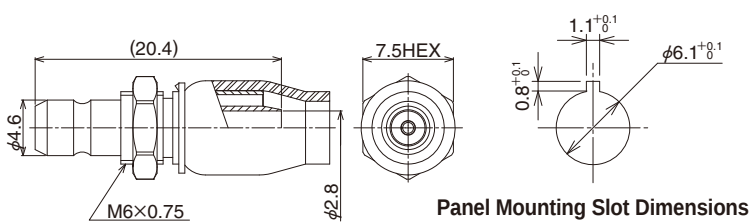
■Jack

●Straight Jack



Part No.	HRS No.	Applicable Cable	Purchase Unit
MSS-J-1.5DV	319-0003-0 00	1.5D-2V	20pcs per bag

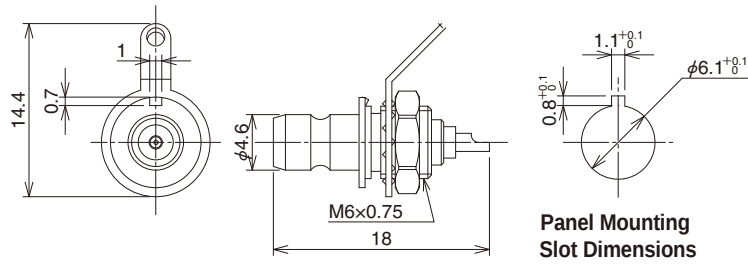
●Panel Jack



Part No.	HRS No.	Applicable Cable	Purchase Unit
MSS-PJ-2.5(40)	319-0016-0 40	2.5D-2V	20pcs per bag

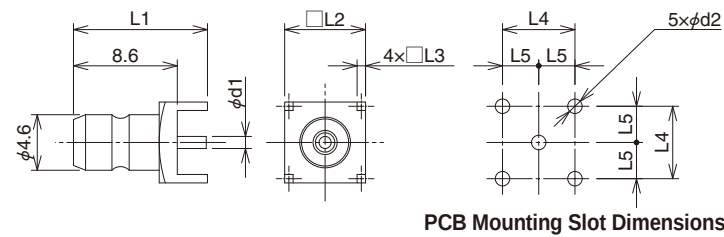
Receptacle

●Straight Receptacle



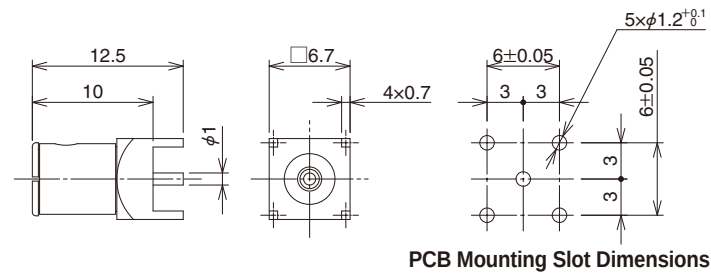
Part No.	HRS No.	Purchase Unit
MSS-R(40)	319-0010-3 40	10pcs per bag

●Straight Receptacle (PCB Mounting Type)



Part No.	HRS No.	φd1	L1	L2	L3	L4	L5	φd2	Purchase Unit
MSS-R-PC(40)	319-0034-1 40	1	11.1	6.7	0.7	6±0.05	3	1.2+0.1/0	100pcs per bag
MSS-R-PC-3(40)	319-0055-1 40	0.8	12.1	5.7	0.62	5.08±0.05	2.54	1+0.1/0	bag

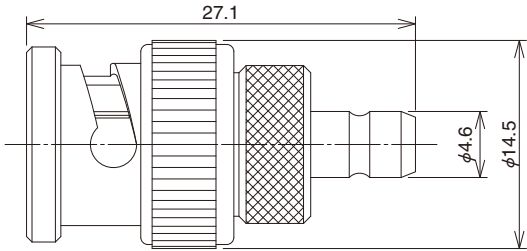
Plug Receptacle (PCB Mounting Type)



Part No.	HRS No.	Purchase Unit
MSS-PR-PC(40)	319-0038-2 40	20pcs per bag

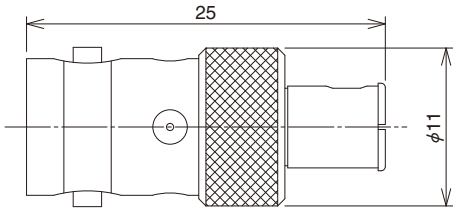
■Conversion Adapter

●BNC Conversion Adapter (BNC Plug — MSS Jack)



Part No.	HRS No.	Purchase Unit
BNCP-MSSJ(40)	311-0082-3 40	5pcs per bag

●BNC Conversion Adapter (BNC Jack- MSS Plug)



Part No.	HRS No.	Purchase Unit
BNCJ-MSSP(40)	311-0081-0 40	5pcs per bag

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
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