



Coaxial Cable

141-24NM+

50Ω 24 inch DC to 18 GHz N-Type Male

FEATURES

- Wideband Frequency Coverage, DC to 18 GHz
- Low Insertion Loss, 1.21 dB Typ. at 18 GHz
- Excellent Return Loss, 27 dB Typ. at 18 GHz
- Hand Formable to Almost Any Custom Shape Without Special Bending Tools
- 8 mm Bend Radius for Tight Installations
- Anti-Torque Nut Prevents Cable Stress during Installation
- Insulated Outer Jacket Standard
- Ideal for Interconnect of Assembled Systems

APPLICATIONS

- Replacement for Custom Bent 0.141" Semi-Rigid Cables
- Communication Receivers and Transmitters
- Military and Aerospace System
- Environmental and Test Chambers

*Generic photo used for illustration purposes only*

Model No.	141-24NM+
Case Style	KQ1637-24
Connectors	N-Type Male

+RoHS Compliant

The +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications

ELECTRICAL SPECIFICATIONS AT +25 °C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		18	GHz
Length ¹			24		inches
Insertion Loss	DC-2	-	0.20	0.60	dB
	2-6	-	0.55	1.10	
	6-12	-	0.90	1.48	
	12-18	-	1.21	2.11	
Return Loss	DC-2	23	45	-	dB
	2-6	23	36	-	
	6-12	17	33	-	
	12-18	17	27	-	

1. Custom sizes available, consult factory.

ABSOLUTE MAXIMUM RATINGS²

Parameter	Ratings
Operating Temperature	-55 °C to +105 °C
Storage Temperature	-55 °C to +105 °C
Power Handling at +25 °C, Sea Level	546 W at 0.5 GHz
	387 W at 1 GHz
	273 W at 2 GHz
	156 W at 6 GHz
	90 W at 18 GHz

2. Permanent damage may occur if any of these limits are exceeded.

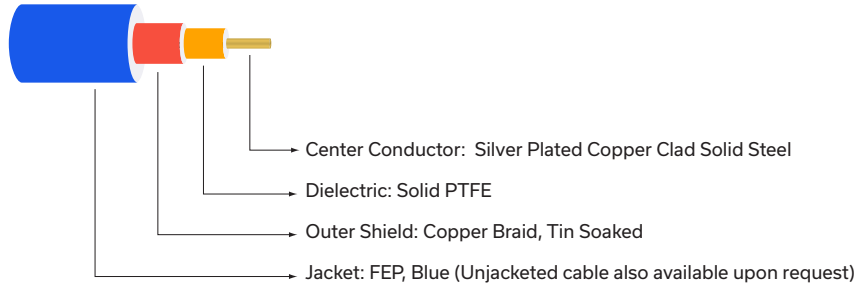


Coaxial Cable

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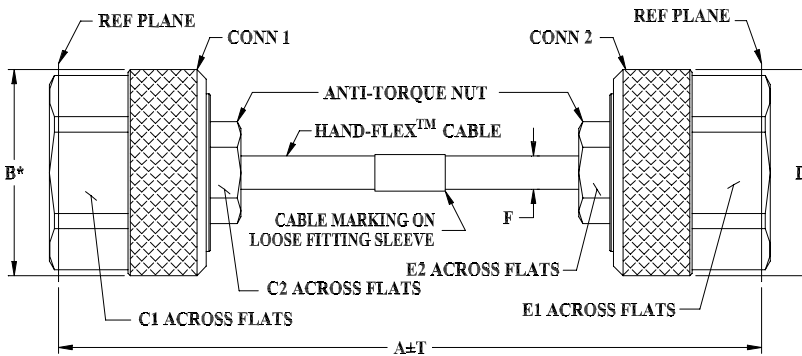
50Ω 24 inch DC to 18 GHz N-Type Male

CABLE CONSTRUCTION



Connectors: Coupling Nut: Brass, Nickel Plated
 Body: Brass, Nickel Plated
 Center Pin: Brass, Gold Plated

OUTLINE DRAWING



* OVERALL CONNECTOR DIMENSION
 (CONNECTOR SHAPE MAY VARY)

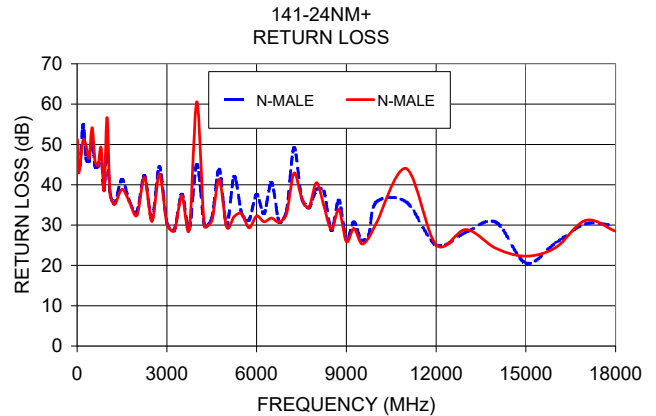
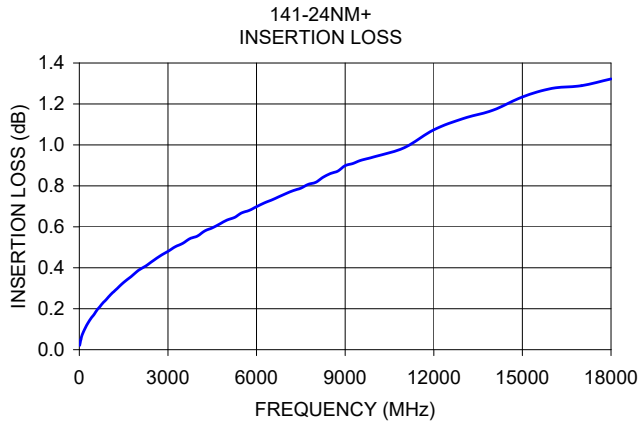
OUTLINE DIMENSIONS (Inch/mm)

A	B	C1	C2	D
24.00	0.88	0.750	0.375	0.88
609.60	22.35	19.05	9.53	22.35
E1	E2	F	T	wt
0.750	0.375	.163±.004	0.15	grams
19.05	9.53	4.14±0.10	3.81	89.43



TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		N-Type Male	N-Type Male
10.0	0.02	46.81	51.21
1000.0	0.26	48.93	56.67
1500.0	0.33	41.23	38.86
2500.0	0.43	31.36	30.88
4000.0	0.55	45.03	60.57
5000.0	0.63	29.98	29.53
6000.0	0.70	37.57	32.27
7000.0	0.76	33.39	32.87
8000.0	0.82	38.81	40.51
9000.0	0.90	26.42	25.89
10000.0	0.94	35.71	30.46
12000.0	1.07	25.09	25.14
14000.0	1.17	30.73	24.25
16000.0	1.28	25.58	24.43
18000.0	1.32	29.83	28.50



NOTES

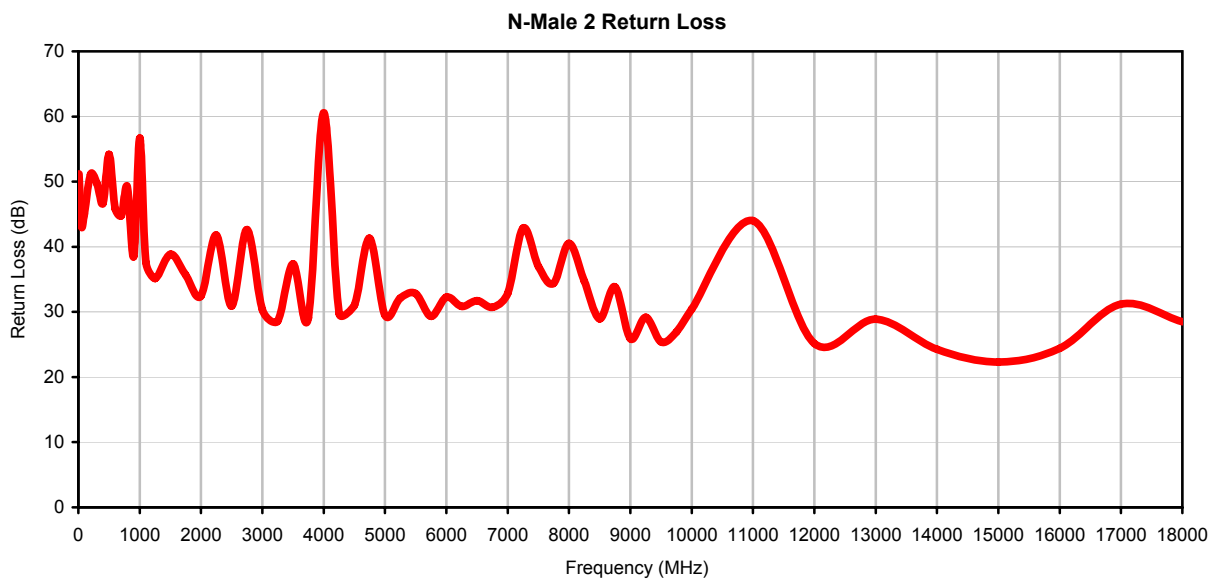
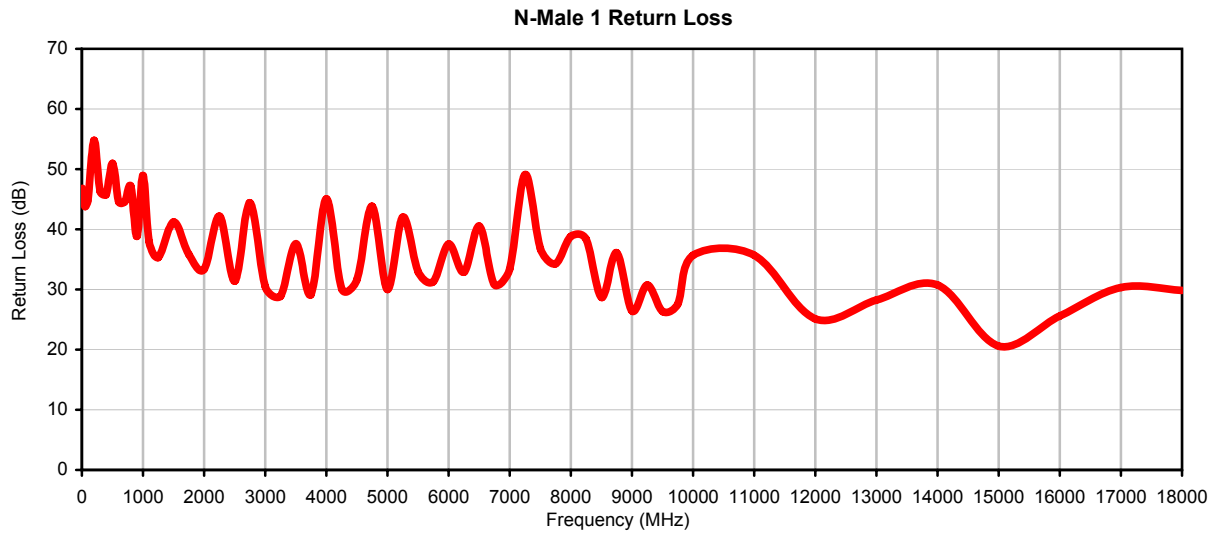
- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

Typical Performance Data

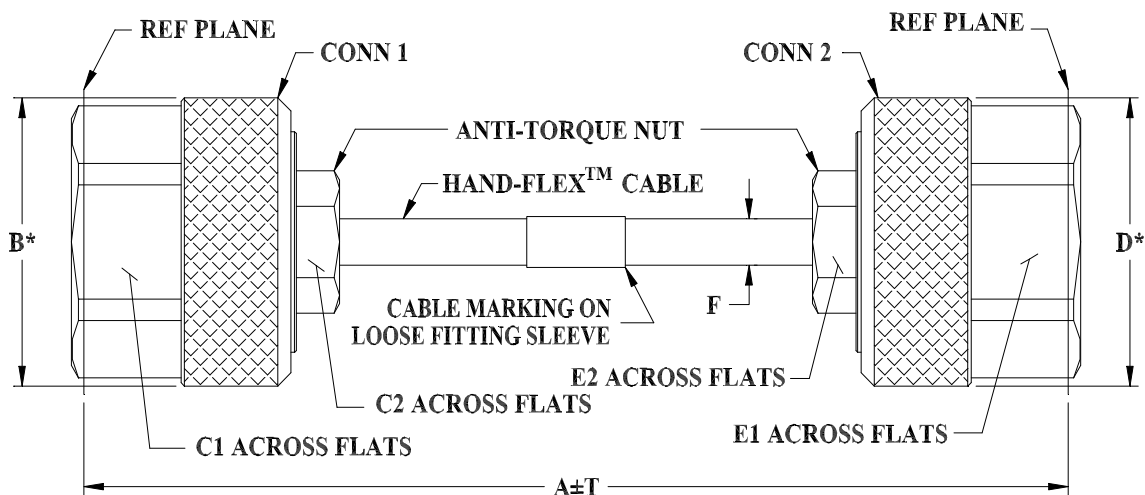
FREQUENCY (MHz)	INSERTION LOSS (dB)	N-MALE 1 RETURN LOSS (dB)	N-MALE 2 RETURN LOSS (dB)
10.0	0.02	46.81	51.21
50.0	0.05	43.76	43.15
100.0	0.07	44.80	45.09
200.0	0.11	54.80	51.07
300.0	0.13	46.35	49.71
400.0	0.15	45.79	46.66
500.0	0.17	50.93	54.17
600.0	0.19	44.58	45.83
700.0	0.21	44.56	44.76
800.0	0.23	47.13	49.22
900.0	0.24	38.84	38.54
1000.0	0.26	48.93	56.67
1100.0	0.27	37.99	37.65
1250.0	0.29	35.31	35.12
1500.0	0.33	41.23	38.86
1750.0	0.36	35.84	35.72
2000.0	0.39	33.37	32.42
2250.0	0.41	42.21	41.82
2500.0	0.43	31.36	30.88
2750.0	0.46	44.43	42.65
3000.0	0.48	30.48	30.35
3250.0	0.50	28.87	28.59
3500.0	0.52	37.62	37.38
3750.0	0.54	29.16	29.09
4000.0	0.55	45.03	60.57
4250.0	0.58	30.09	29.77
4500.0	0.59	31.68	31.05
4750.0	0.61	43.82	41.34
5000.0	0.63	29.98	29.53
5250.0	0.65	42.03	32.12
5500.0	0.67	32.90	32.79
5750.0	0.68	31.29	29.32
6000.0	0.70	37.57	32.27
6250.0	0.72	32.89	30.84
6500.0	0.73	40.54	31.73
6750.0	0.75	30.82	30.72
7000.0	0.76	33.39	32.87
7250.0	0.78	49.12	42.88
7500.0	0.79	36.76	36.92
7750.0	0.81	34.28	34.41
8000.0	0.82	38.81	40.51
8250.0	0.84	38.36	34.74
8500.0	0.86	28.65	28.91
8750.0	0.87	36.13	33.85
9000.0	0.90	26.42	25.89
9250.0	0.91	30.75	29.17
9500.0	0.92	26.30	25.40
9750.0	0.93	27.55	26.90
10000.0	0.94	35.71	30.46
11000.0	0.99	35.71	44.03
12000.0	1.07	25.09	25.14
13000.0	1.13	28.23	28.88
14000.0	1.17	30.73	24.25
15000.0	1.23	20.60	22.30
16000.0	1.28	25.58	24.43
17000.0	1.29	30.32	31.18
18000.0	1.32	29.83	28.50



Typical Performance Curves



Outline Dimensions



* OVERALL CONNECTOR DIMENSION
(CONNECTOR SHAPE MAY VARY)

KQ1637 SERIES
N MALE (CONN-1)
N MALE (CONN-2)

CASE STYLE #	A		B	C1	C2	D	E1	E2	F		T		WEIGHT GRAMS
	INCH	MM							141U-ANM+	141-ANM+	INCH	MM	
KQ1637-3	3.00	76.20	.88 (22.35)	.750 (19.05)	.375 (9.53)	.88 (22.35)	.750 (19.05)	.375 (9.53)	.141 ∇ .003 (3.58 ∇ 0.07)	.163 ∇ .004 (4.14 ∇ 0.10)	.05	1.27	65.43
KQ1637-6	6.00	152.40									.05	1.27	68.86
KQ1637-7	7.00	177.80									.10	2.54	70.00
KQ1637-8	8.00	203.20									.10	2.54	71.14
KQ1637-10	10.00	254.00									.10	2.54	73.43
KQ1637-12	12.00	304.80									.10	2.54	75.72
KQ1637-15	15.00	381.00									.15	3.81	79.15
KQ1637-18	18.00	457.20									.15	3.81	82.57
KQ1637-24	24.00	609.60									.15	3.81	89.43
KQ1637-30	30.00	762.00									.20	5.08	96.29
KQ1637-59.1	59.06	1500.00	.40	10.16	129.55								

Unless otherwise specified dimensions are in inches (mm).

Tolerances: 2Pl. \pm .03; 3Pl. \pm .015

Note:

1. 141 Hand-Flex™ Coaxial Cable.
2. "A" represents length of cable.



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Mini-Circuits ISO 9001 & ISO 14001 Certified

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All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 105° C or -55° to 85° C (see datasheet) Ambient Environment	Individual Model Data sheet
Storage Temperature	-55° to 105° C or -55° to 85° C (see data sheet) Ambient Environment	Individual Model Data Sheet
Thermal Shock	-55° to 100°C, 100 Cycles	MIL-STD-202F; Method 107G
Multiple Bend Radius	40 mm, 5 times for 141 series cables 30 mm, 5 times for 086 series cables	
Single Bend Radius	8 mm for 141 series cables 6 mm for 086 series cables	