

**FEATURES**

- Wideband Frequency Coverage, DC to 18 GHz
- Low Insertion Loss, 0.74 dB Typ. at 18 GHz
- Excellent Return Loss, 19 dB Typ. to 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 Systems
- Environmental and Test Chambers



Generic photo used for illustration purposes only

<b>Model No.</b>	141-12NM+
<b>Case Style</b>	KQ1637-12
<b>Connectors</b>	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 <sup>1</sup>			12		inches
Insertion Loss	DC-2	-	0.11	0.40	dB
	2-6	-	0.39	0.74	
	6-12	-	0.53	0.98	
	12-18	-	0.69	1.37	
Return Loss	DC-2	23	44	-	dB
	2-6	23	33	-	
	6-12	17	33	-	
	12-18	17	26	-	

1. Custom sizes available, consult factory.

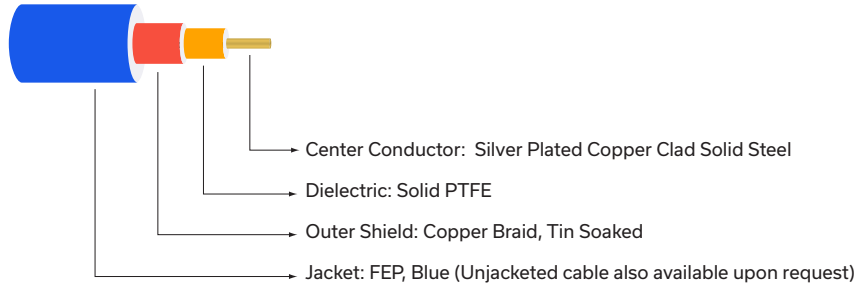
**ABSOLUTE MAXIMUM RATINGS<sup>2</sup>**

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
	121 W at 10 GHz
	90 W at 18 GHz

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

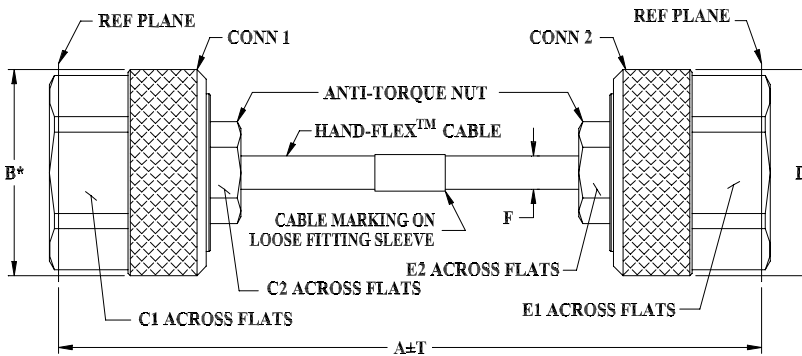


### CABLE CONSTRUCTION



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

### OUTLINE DRAWING



\* OVERALL CONNECTOR DIMENSION  
 (CONNECTOR SHAPE MAY VARY)

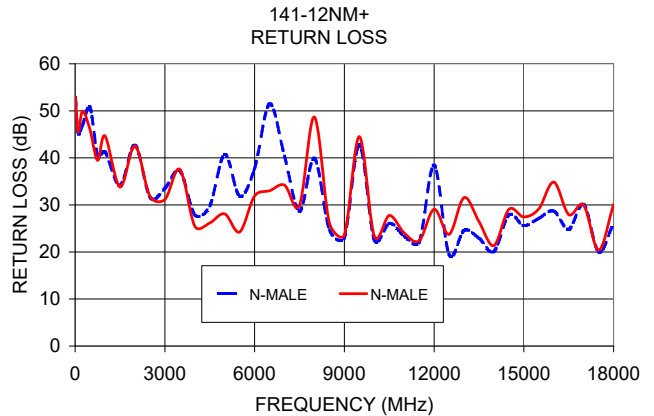
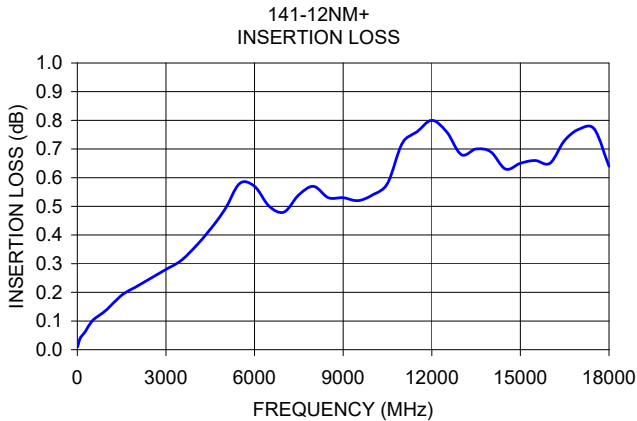
### OUTLINE DIMENSIONS (Inch/mm)

A	B	C1	C2	D
12.00	0.88	0.750	0.375	0.88
304.80	22.35	19.05	9.53	22.35
E1	E2	F	T	wt
0.750	0.375	.163±.004	0.10	grams
19.05	9.53	4.14±0.10	2.54	75.72



### TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		N-Type Male	N-Type Male
10.0	0.01	52.86	52.98
1000.0	0.14	41.30	44.66
1500.0	0.19	34.13	33.79
2500.0	0.25	31.66	31.82
4000.0	0.36	27.88	25.44
5000.0	0.49	40.75	28.12
6000.0	0.57	37.76	31.91
7000.0	0.48	40.38	34.20
8000.0	0.57	39.91	48.66
9000.0	0.53	23.08	23.60
10000.0	0.54	22.62	23.40
12000.0	0.80	38.45	29.07
14000.0	0.69	20.08	21.37
16000.0	0.65	28.71	34.87
18000.0	0.64	26.08	30.13

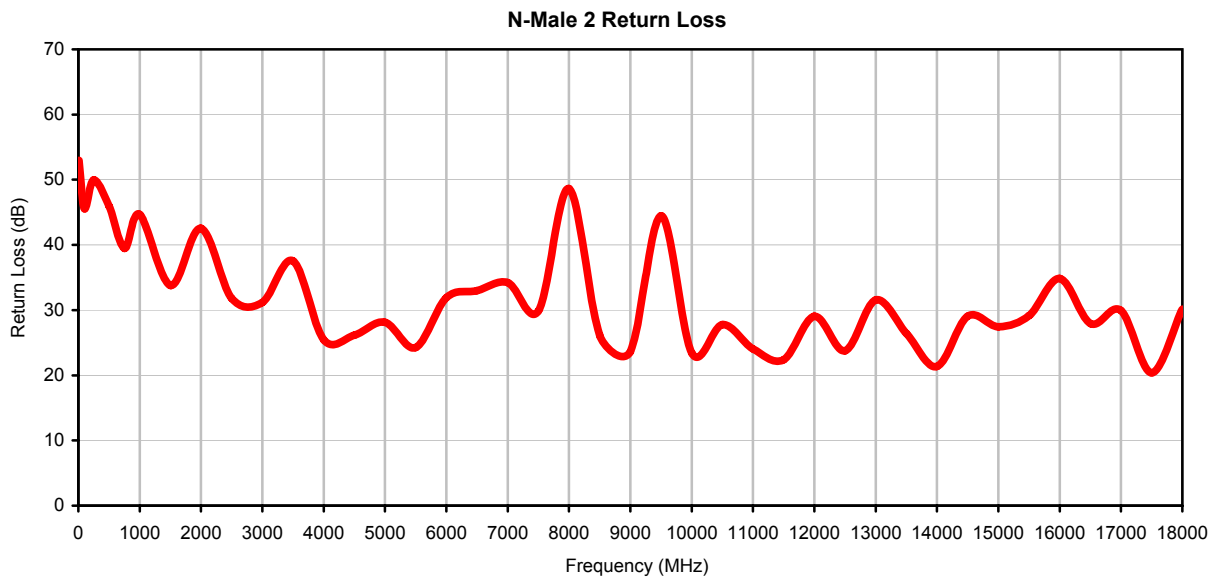
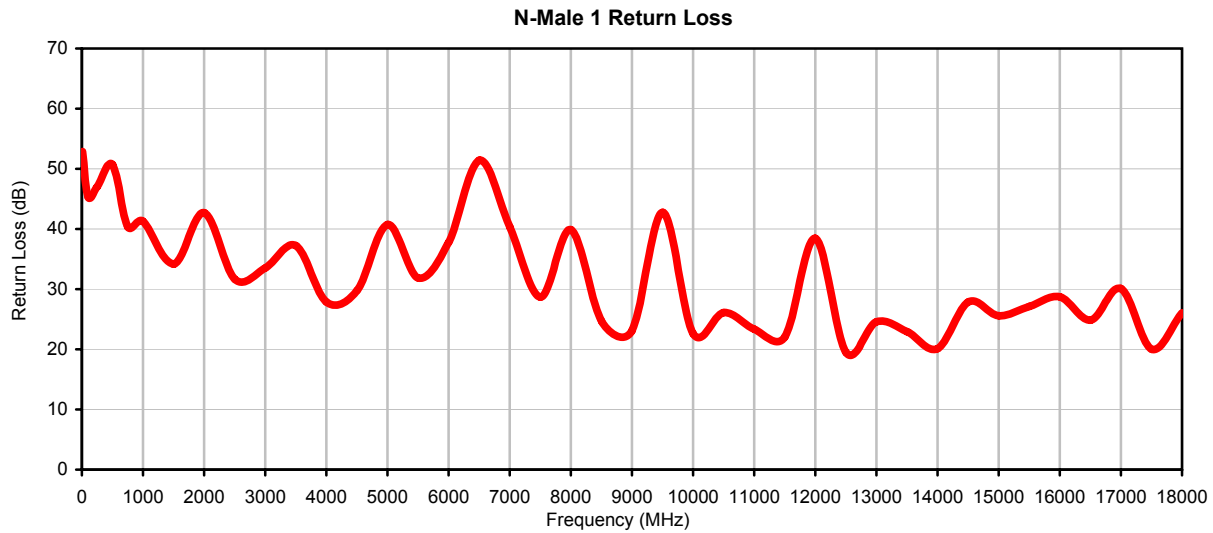


- NOTES**
- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
  - B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' 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](http://www.minicircuits.com/terms/viewterm.html)

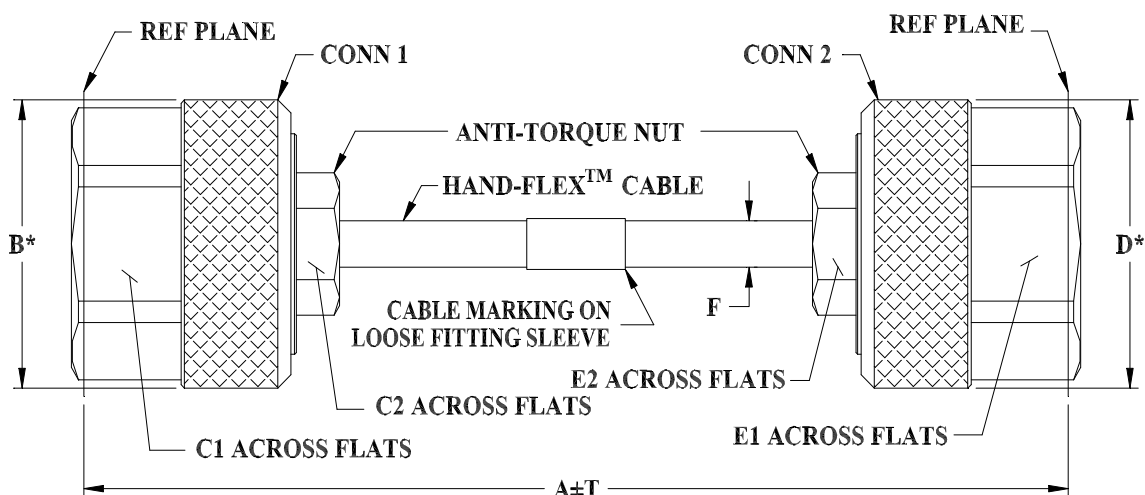
## Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	N-MALE 1 RETURN LOSS (dB)	N-MALE 2 RETURN LOSS (dB)
10.0	0.01	52.86	52.98
100.0	0.04	45.35	45.54
250.0	0.06	47.02	49.96
500.0	0.10	50.71	45.93
750.0	0.12	40.37	39.46
1000.0	0.14	41.30	44.66
1500.0	0.19	34.13	33.79
2000.0	0.22	42.72	42.56
2500.0	0.25	31.66	31.82
3000.0	0.28	33.52	31.15
3500.0	0.31	37.25	37.57
4000.0	0.36	27.88	25.44
4500.0	0.42	29.78	26.18
5000.0	0.49	40.75	28.12
5500.0	0.58	31.87	24.25
6000.0	0.57	37.76	31.91
6500.0	0.50	51.45	33.01
7000.0	0.48	40.38	34.20
7500.0	0.54	28.66	29.91
8000.0	0.57	39.91	48.66
8500.0	0.53	24.70	26.16
9000.0	0.53	23.08	23.60
9500.0	0.52	42.74	44.49
10000.0	0.54	22.62	23.40
10500.0	0.58	26.12	27.77
11000.0	0.72	23.37	24.04
11500.0	0.76	22.07	22.38
12000.0	0.80	38.45	29.07
12500.0	0.76	19.46	23.74
13000.0	0.68	24.56	31.56
13500.0	0.70	22.91	26.43
14000.0	0.69	20.08	21.37
14500.0	0.63	27.86	29.07
15000.0	0.65	25.61	27.45
15500.0	0.66	27.13	29.18
16000.0	0.65	28.71	34.87
16500.0	0.73	24.82	27.94
17000.0	0.77	30.10	29.94
17500.0	0.77	20.01	20.39
18000.0	0.64	26.08	30.13

## 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 $\nabla$ .003 (3.58 $\nabla$ 0.07)	.163 $\nabla$ .004 (4.14 $\nabla$ 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:

- 141 Hand-Flex™ Coaxial Cable.
- “A” represents length of cable.



Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

Mini-Circuits ISO 9001 & ISO 14001 Certified

INTERNET <http://www.minicircuits.com>

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661



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	