



# Coaxial Cable

50Ω 7 inch DC to 18 GHz

## 141-7NM+

### Maximum Ratings

Operating Temperature	-55°C to 105°C	
Storage Temperature	-55°C to 105°C	
Power Handling at 25°C, Sea Level	546W at 0.5 GHz	387W at 1 GHz
	273W at 2 GHz	156W at 6 GHz
	121W at 10 GHz	90W at 18 GHz

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

### Features

- Wideband frequency coverage, DC to 18 GHz
- Low Loss, 0.45 dB at 18 GHz
- Excellent Return Loss, 18 dB at 18 GHz
- Hand formable to almost any custom shape without special bending tools
- 8mm bend radius for tight installations
- Anti-torque nut prevents cable stress during installation
- Insulated outer jacket standard<sup>1</sup>
- **Ideal for interconnect of assembled systems**



CASE STYLE: KQ1637-7

Connectors	Model
N-Male	141-7NM+

**+RoHS Compliant**

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

### Applications

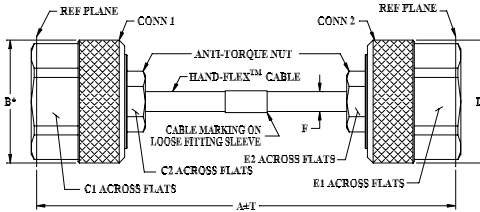
- Replacement for custom bent 0.141" semi-rigid cables
- Communication receivers and transmitters
- Military and aerospace system
- Environmental and test chambers

### Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		18	GHz
Length			7		Inches
Insertion Loss	DC - 2	—	0.08	0.32	dB
	2 - 6	—	0.11	0.58	
	6 - 12	—	0.21	0.77	
	12 - 18	—	0.46	1.07	
Return Loss	DC - 2	23	31	—	dB
	2 - 6	23	28	—	
	6 - 12	17	21	—	
	12 - 18	17	18	—	

1. Unjacketed cable also available upon request.
2. Custom sizes available, consult factory.

### Outline Drawing

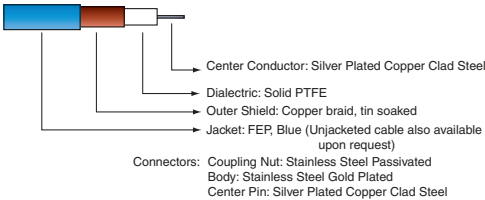


\* OVERALL CONNECTOR DIMENSION (CONNECTOR SHAPE MAY VARY)

### Outline Dimensions (inch/mm)

A	B	C1	C2	D
7.00	0.88	0.750	0.375	0.88
177.80	22.352	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	70

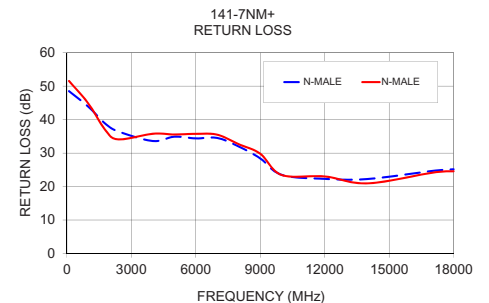
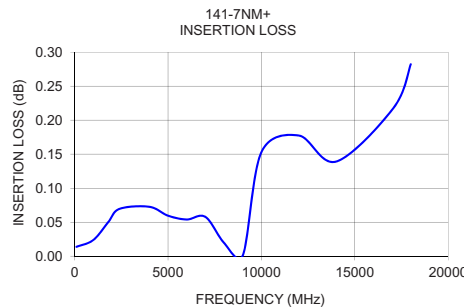
### Cable Construction



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		N-MALE	N-MALE
100	0.01	48.5	51.5
1000	0.02	43.8	44.8
1800	0.05	38.7	36.8
2500	0.13	33.9	33.9
4000	0.16	30.2	30.3
5000	0.18	38.5	42.5
6000	0.05	34.4	35.7
7000	0.21	45.4	51.5
8000	0.23	31.8	32.0
9000	0.25	26.8	26.8
10000	0.15	23.5	23.4
12000	0.30	31.6	32.5
14000	0.32	26.7	26.8
16000	0.35	28.3	27.0
18000	0.28	25.1	24.6

### Typical Bending Capability



### Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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/WCLStore/terms.jsp](http://www.minicircuits.com/WCLStore/terms.jsp)

