Coaxial Cable

141-24NM-300W+

50Ω 24 inch DC to 6 GHz

THE BIG DEAL

- Wideband frequency coverage, DC to 6 GHz
- High Power, 300 W at 3 GHz
- Low Loss, 0.74 dB typ at 6 GHz
- Excellent Return Loss, 26 dB typ up to 6 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
- Ideal for interconnect of assembled systems

Generic photo used for illustration purposes only

Model No.	141-24NM-300W+	
Case Style	KQ1637-24	
Connectors	N-Male	N-Male

+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

PRODUCT OVERVIEW

141-NM-300W+ series Hand-Flex™ coaxial cables are ideal for interconnecting coaxial components and sub-assemblies in a wide range of systems, including communications, military and aerospace, environmental test chambers and more. The hand-formable cable provides a minimum bend radius of 8mm to accommodate tight layouts without the need for bending tools, adapters or brackets. N-male connectors make these cables ideal for connection of assemblies with N connector types. 141-NM-300W+ series cables are available in a variety of lengths to meet to meet your system needs.

KEY FEATURES

Feature	Advantages
Hand-formable RF cables	Facilitates the assembly of coaxial systems and sub-systems without the need for special cable-bending tools or adapt-ers. Reduces the risk of damage during bending.
Tight bend-radius, 8mm	8mm bend-radius makes the cable ideal for connections in tight spaces and crowded layouts.
Low insertion loss	Minimizes overall signal path loss.
Excellent return loss	Minimizes signal reflection and VSWR ripple contribution.
N-Male connectors	Supports easy interconnection of components and equipment in systems with N connector types.
Good power handling • 300W at 3 GHz	Supports medium to high RF power levels used in transmit paths.

REV. OR
ECO-012744
141-24NM-300W+
MCL NY
040822

Coaxial Cable

141-24NM-300W+

MAXIMUM RATINGS

Operating Temperature	-45°C to 85°C
Storage Temperature	-55°C to 105°C
Power Handling at 25°C, Sea Level	300 W at 3 GHz

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

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency range		DC		6	GHz
Length			24		inches
Insertion Loss	DC - 2	-	0.22	0.60	dB
	2 - 6	-	0.57	1.11	
Return Loss	DC - 2	23	41	-	dB
	2 - 6	23	36	-	

OUTLINE DRAWING

OUTLINE DIMENSIONS (Inch / mm)

A	B	C1	C2	D
24.00	0.88	0.750	0.375	0.88
609.60	22.352	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

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB) N-MALE	Return Loss (dB) N-MALE
10	0.02	45.97	46.83
100	0.07	37.14	37.56
500	0.17	51.24	47.15
1000	0.27	47.40	44.46
1500	0.34	39.33	39.71
2000	0.40	34.92	39.36
2500	0.45	34.91	39.37
3000	0.50	39.02	40.60
3500	0.54	39.12	38.74
4000	0.58	39.76	39.37
4500	0.61	40.83	39.38
5000	0.65	36.06	38.07
5500	0.69	27.98	32.31
6000	0.74	25.56	29.75

CABLE CONSTRUCTION

- Center Conductor: Silver Plated Copper Clad Steel
- Dielectric: Solid PTFE
- Outer Shield: Copper braid, tin soaked
- Jacket: FEP, Blue (Unjacketed cable also available upon request)

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

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

Case Style KQ

KQ1637

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									.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	.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)	.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. ± .03; 3Pl. ± .015

Note:

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

Mini-Circuits®
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Mini-Circuits ISO 9001 & ISO 14001 Certified

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Mini-Circuits

Environmental Specifications ENV52T1

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	-45° to 85°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 105°C Ambient Environment	Individual Model Data Sheet
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	

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