

# CBL-4NM-75+

### **FEATURES**

- RoHS compliant
- Wideband coverage, DC to 3000 MHz
- Extra rugged construction with strain relief for longer life
- Stainless steel N-Male connectors for long mating-cycle life
- Useful over temperature range, -55°C to +105°C
- Triple shield cable for excellent shielding effectiveness
- Flexible for easy connection & bend radius
- 6 month guarantee\*

### **APPLICATIONS**

- High volume production test stations
- Research & development labs
- Environmental & temperature test chambers
- Replacement for OEM test port cables
- Field RF testing
- Cellular infrastructure site testing



Generic photo used for illustration purposes only

Model No.	CBL-4NM-75+
Case Style	ND1920-4
Connectors	N-Male

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

 $\label{eq:product Guarantee*} Mini-Circuits' will repair or replace your test cable at its option if the connector attachment fails within <u>six</u> months of shipment. This guarantee excludes cable or connector interface damage from misuse or abuse.$ 

### **PRODUCT OVERVIEW**

Mini-Circuits CBL-NM-75+ series  $75\Omega$  test cables provide extra rugged yet flexible construction, performance qualified up to 20,000 flex cycles for test applications from DC to 3000 MHz, backed by our 6-month product guarantee. Connectors are N-type (M) to N-type (M). Inner conductor is solid silver-plated, copper clad steel, and shield is silver-plated copper braid with aluminum-polymide tape interlayer. Available in a variety of lengths.

N-Male

#### **KEY FEATURES**

Feature	Advantages			
Wideband, DC to 3000 MHz	Wide frequency range covers many applications.			
High Power Handling: • 338W @ 0.5 GHz • 98W @ 3 GHz	High power handling makes CBL test cables suitable for applications with a wide range of requirements.			
Good Return Loss and Low Insertion Loss	Well matched for $75\Omega$ systems across the entire frequency band.			
Extra rugged, triple shield cable construction	CBL-FM-75+ test cables provide outstanding durability, flexibility, and shielding effectiveness.			
Passivated stainless steel N-Male connectors	Long connector mating cycle life.			
Superior stability of Insertion Loss and Return Loss	Reliable performance in almost any test layout configuration.			

REV. A ECO-019630 CBL-4NM-75+ MCL NY 231010





### **ELECTRICAL SPECIFICATIONS AT +25°C**

Parameter	Frequency (MHz)	Min.	Тур.	Max.	Units
Frequency range		DC		3000	MHz
Length <sup>1</sup>		4			FT
	DC - 500	-	0.26	0.5	
Insertion Loss	500 - 1000	_	0.43	0.7	dB
	1000 - 2000	_	0.62	1.0	
	2000 - 3000	_	0.80	1.2	
	DC - 500	26	41	_	dB
Determine the second	500 - 1000	26	42	—	
Return Loss	1000 - 2000	24	34	_	
	2000 - 3000	24	31	_	

1. Custom sizes available, consult factory.

### **ABSOLUTE MAXIMUM RATINGS**

Parameter	Ratings		
Operating Temperature	-55°C to +105°C		
Storage Temperature	-55°C to +105°C		
	338W Max. at 0.5 GHz		
Power Handling at 25°C, Sea Level	210W Max. at 1 GHz		
Power Handling at 25°C, Sea Level	143W Max. at 2 GHz		
	98W Max. at 3 GHz		

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



# **CBL-4NM-75+**

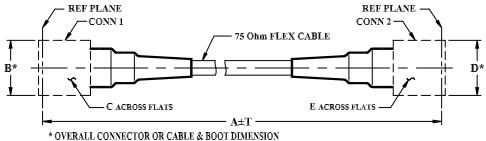
### **CABLE CONSTRUCTION**



### Connectors:

- Passivated stainless steel
- Captive contact
- Thick wall interface (SMA)
- · Gold plated beryllium copper center contacts
- PTFE dielectric

### **OUTLINE DRAWING**



OVERALL CONNECTOR OR CABLE & BOOT DIMENSIO (CONNECTOR SHAPE MAY VARY)

## OUTLINE DIMENSIONS $\binom{\text{Inch}}{\text{mm}}$

	A	В	С	D	Е		т	wt
Feet	Meters	.81	.750	.81	.750	Feet	Meters	grams
4	1.22	20.57	19.05	20.57	19.05	0.12	0.04	147

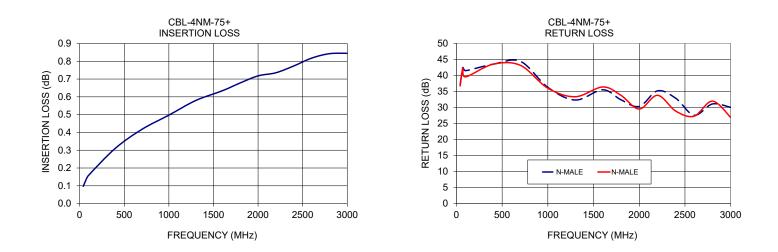




N-Male

### **TYPICAL PERFORMANCE DATA**

Frequenc	Insertion Loss	Return Loss (dB)		
(MHz)	(dB)	N-Male	N-Male	
40	0.10	36.99	36.70	
70	0.13	42.43	42.26	
100	0.16	41.47	39.54	
400	0.31	43.47	43.47	
700	0.42	44.36	43.12	
1000	0.50	36.26	35.99	
1300	0.58	32.30	33.33	
1600	0.63	35.50	36.38	
1800	0.68	32.38	33.76	
2000	0.72	30.30	29.50	
2200	0.74	35.16	33.77	
2400	0.77	32.84	28.83	
2600	0.82	27.57	27.26	
2800	0.84	31.07	31.96	
3000	0.84	30.02	26.89	



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/MCLStore/terms.jsp

### **Mini-Circuits**