COAXIAL

Termination

KARN-50+

50Ω DC to 8 GHz N-Type Male

FEATURES

- Wideband coverage, DC to 8 GHz
- Useable to 9 GHz
- Return Loss, 20 dB typ. at 9 GHz
- Rugged Construction

Generic photo used for illustration purposes only

Model No.	KARN-50+
Case Style	LL718
Connectors	N-Type-Male

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

APPLICATIONS

- Cellular Communications
- Satellite Communications
- Defense Communications
- Test Setup

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		8	GHz
Impedance			50		Ohms
Return Loss	DC - 0.5	30	—	—	dB
	DC - 1	30	—	—	
	DC - 2	29	—	—	
	DC - 5	27	—	—	
	DC - 8	20	—	—	
Power Rating*	DC - 8	—	—	2	W

*At +70°C, derate linearly at 0.025 W/°C at +100°C.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +100°C

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

REV. F
ECO-012138
KARN-50+
MCL NY
250407

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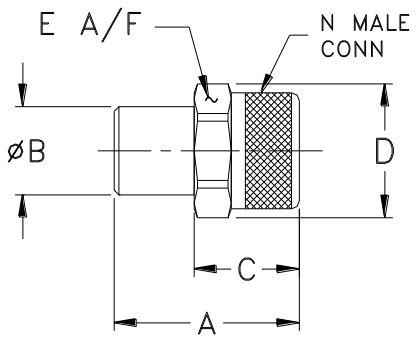
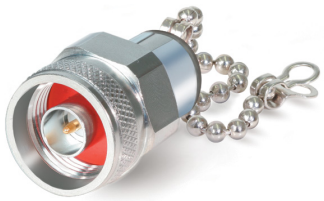
OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch / mm)

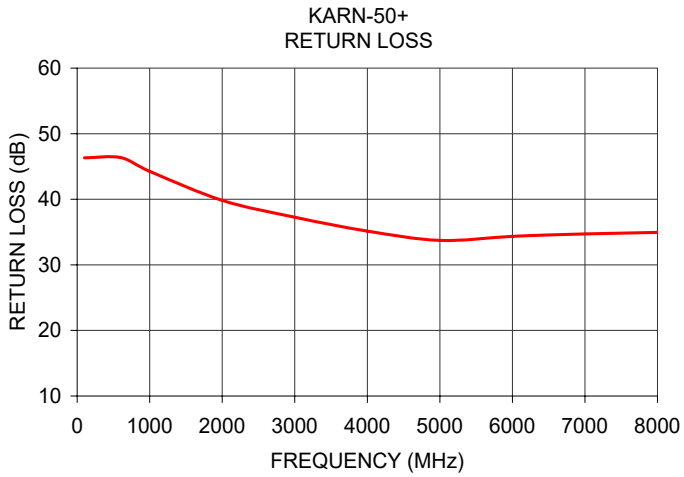
A	B	C	D	E	wt
1.18	0.56	0.67	0.85	0.787	grams
29.97	14.22	17.02	21.59	19.99	30.0



To order KARN-50+ with 3½ length chain and end coupling with .130" diameter mtg. hole, use part no. KARN-50CN+.

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Return Loss (dB)
100	46.31
600	46.36
1000	44.26
2000	39.83
3000	37.27
4000	35.14
5000	33.72
6000	34.35
7000	34.72
8000	34.96



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

Termination 50 Ω , N-TYPE

KARN-50+

Typical Performance Data

FREQUENCY (MHz)	RETURN LOSS (dB)
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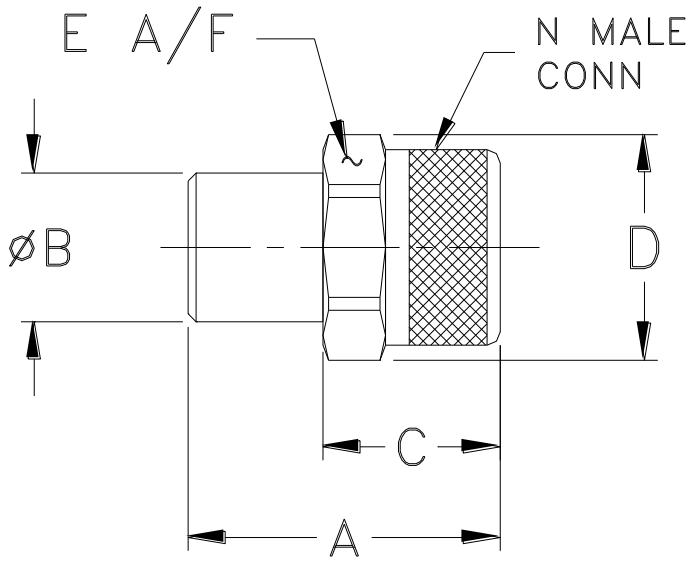
3000	37.27
4000	35.14
5000	33.72
6000	34.35
7000	34.72
8000	34.96

Typical Performance Curves

Case Style LL

Outline Dimensions

LL718



CASE #.	A	B	C	D	E	WT GRAMS
LL718	1.18 (30.00)	.56 (14.22)	.67 (17.02)	.85 (21.59)	.787 (20.00)	30.0

Dimensions are in inches (mm). Tolerances: 2Pl. ± .03; 3Pl. ± .015

Notes:

1. Case Material: Brass.
2. Case Finish: Tri-metal (Cu-Sn-Zn) plate.

Mini-Circuits

Environmental Specifications ENV28

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 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I