# UNMP-R5075-33+

 $50/75\Omega$ DC to 3000 MHz

# **The Big Deal**

- Minimum loss pad
- Wideband coverage, DC to 3000 MHz
- Excellent VSWR



Generic photo used for illustration purposes only CASE STYLE: FF779

# **Product Overview**

Mini-Circuits' UNMP-R5075-33+ is a coaxial  $50/75\Omega$  matching pad covering the DC to 3000 MHz frequency range, supporting impedance matching in a wide range of systems. This model is ideal for  $50/75\Omega$  impedance matching in systems where minimizing overall signal loss is a priority. The matching pad housed in a rugged unibody construction with N-Male (50 $\Omega$ ) to N-Female (75 $\Omega$ ) connectors.

# **Key Features**

Feature	Advantages
Wideband, DC to 3000 MHz	Supports a wide variety of applications including CATV and DOCSIS® 3.1 systems and equipment.
Compact size, 0.68" x 2.11" x 0.71"	Accommodates tight space requirements for crowded system layouts.
Connectorized package N-Male (50 $\Omega$ ) to N-Female (75 $\Omega$ ) connectors	Supports connections between components with different connector types.

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 Firms"); 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

# **Matching Pad**

# UNMP-R5075-33+

# $50/75\Omega$

# DC to 3000 MHz

**Maximum Ratings** 

Operating Temperature	-45°C to 100°C
Storage Temperature	-55°C to 100°C
Input Power	2W

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

#### **Features**

- · Minimum loss pad
- Wideband coverage, DC to 3000 MHz
- Excellent VSWR
- Rugged unibody construction

### **Applications**

• Impedance matching



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C	ASE STYLE:	FF779
Connectors	Model	

50ΩM-N UNMP-R5075-33+  $75\Omega F-N$ 

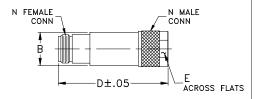
#### +RoHS Compliant

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

#### **Coaxial Connections**

Input	N-Male
Output	N-Female

#### **Outline Drawing**

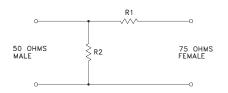


Α	В	С	D	Е	Wt.
	.71		2.11	.718	grams
	18 03		53 50	18 2/	72.5

Note: Please refer to case style drawing for details

# Outline Dimensions (inch )

# **Electical Schematic**



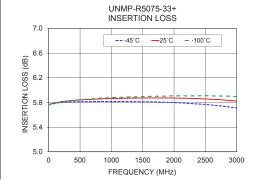
## Electrical Specifications at 25°C

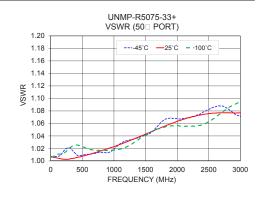
Electrical operations at 20 0						
Parameter	Frequency (MHz)	Min.	Тур.	Max.	Unit	
Frequency Range		DC		3000	MHz	
Nominal	DC-3000		5.7			
Flatness <sup>2</sup>	DC-3000		±0.15			
Attenuation <sup>1</sup>	DC-100			0.2	dB	
	100-1000			0.3		
	1000-3000			0.4		
	DC-100		1.01	1.10		
VSWR	100-1000		1.05	1.10	:1	
	1000-3000		1.1	1.20		
Input Power	DC-3000			2	W	

- 1. Attenuation varies by 0.3 dB max. over temperature
- 2. Flatnes= variation over band divided by 2

## Typical Performance Data 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		<b>50</b> $\Omega$	<b>75</b> $\Omega$
10	5.77	1.01	1.00
50	5.78	1.01	1.00
100	5.79	1.00	1.00
300	5.82	1.00	1.01
500	5.84	1.01	1.01
800	5.86	1.02	1.02
950	5.86	1.02	1.03
1000	5.86	1.02	1.03
1200	5.87	1.03	1.04
1500	5.87	1.04	1.05
1800	5.87	1.06	1.06
2000	5.87	1.06	1.07
2300	5.87	1.07	1.07
2500	5.86	1.08	1.08
2800	5.84	1.08	1.08
3000	5.82	1.08	1.08





- Notes
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