# Coaxial **Slope Equalizer**

50Ω 950 to 2150 MHz

# **ZEQ-8-222N+**

## **The Big Deal**

- Good matching
- Minimal deviation in the attenuation slope ± 0.4 dB
- Connectorized package



## **Product Overview**

ZEQ-8-222N+ is a 50Ω coaxial slope Equalizer. This model offers excellent performance in the "L band" frequency range of 950-2150 MHz with minimal deviation in the attenuation slope.

## **Key Features**

| Feature   | Advantages   |  |  |
|---|--|--|--|
| Minimal deviation in the attenuation slope, ± 0.4dB | Provide low signal distortion over the passband. Can used in satellite system.                     |  |  |
| Good matching in the passband                       | Good 50 $\Omega$ matching between input and output.  |  |  |
| Connectorized package                               | This connectorized package is easy to interface with other devices and well suits for test setups. |  |  |

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.
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# Coaxial Slope Equalizer

## 50Ω 950 to 2150 MHz

#### Maximum Ratings

| Operating Temperature | -40°C to 85°C  |  |  |
|-----------------------|----------------|--|--|
| Storage Temperature   | -55°C to 100°C |  |  |
| Input power           | +20 dBm        |  |  |

Permanent damage may occur if any of these limits are exceeded

#### **Coaxial Connections**

| Input  | (N Male)   |
|--------|------------|
| Output | (N Female) |

### Outline Drawing



| <b>Outline Dimensions</b> |       |       |       | ( inch ) |
|---------------------------|-------|-------|-------|----------|
| Α                         | в     | С     | D     | Е        |
| 1.25                      | 1.25  | 0.94  | 0.63  | 0.47     |
| 31.75                     | 31.75 | 23.88 | 16.00 | 11.94    |
| F                         | G     | н     |       | wt       |
| 1.00                      | 0.13  | 0.13  |       | grams    |
| 25.40                     | 3.18  | 3.18  |       | 91       |

#### **Typical Frequency Response**



#### Features

- · Good matching in passband
- Minimal deviation in the attenuation slope  $\pm$  0.4 dB
- Connectorized package

#### Applications

- Loss compensation
- · Satellite L band applications

# ZEQ-8-222N+



CASE STYLE: H795-4 Connectors Model

N-M/F ZEQ-8-222N+

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

#### Electrical Specifications at 25°C

| Parameter       | Condition    | Min. | Тур. | Max. | Units |
|-----------------|--------------|------|------|------|-------|
| Frequency Range | -            | 950  | -    | 2150 | MHz   |
|                 | 950 MHz      | 12.5 | -    | 14.5 |       |
| Insertion Loss  | 1550 MHz     | 7.4  | -    | 10.0 | dB    |
|                 | 2150 MHz     | 3.4  | -    | 6.6  |       |
| VSWR            | 950-2150 MHz | -    | 1.1  | 1.6  | :1    |

#### Typical Performance Data at 25°C

| - 71               |                        | *            |
|--------------------|------------------------|--------------|
| Frequency<br>(MHz) | Insertion Loss<br>(dB) | VSWR         |
| 950.0<br>1000 0    | 13.86<br>13.45         | 1.20         |
| 1100.0             | 12.62                  | 1.17         |
| 1200.0<br>1250.0   | 11.79<br>11.37         | 1.15<br>1.14 |
| 1300.0             | 10.95                  | 1.12         |
| 1500.0             | 9.33                   | 1.07         |
| 1550.0<br>1750.0   | 8.94<br>7.45           | 1.06<br>1.03 |
| 1850.0             | 6.77                   | 1.05         |
| 2000.0             | 5.84                   | 1.08         |
| 2100.0<br>2150.0   | 5.28<br>5.02           | 1.09<br>1.10 |
|                    |                        |              |

#### **Simplified Functional Schematic**



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## **Slope Equalizer**







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