

# Coaxial Slope Equalizer

## ZEQ-3-222S+

50Ω 950 to 2150 MHz

### The Big Deal

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



CASE STYLE: H16

### Product Overview

ZEQ-3-222S+ 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, $\pm 0.4$ dB | Provide low signal distortion over the passband. Can used in satellite system.                     |
| Good matching in the passband                            | Good 50Ω 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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## ZEQ-3-222S+

50Ω 950 to 2150 MHz

### Maximum Ratings

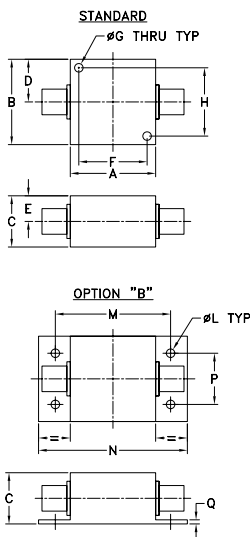
|                       |                |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C  |
| Storage Temperature   | -55°C to 100°C |
| Input power           | +20 dBm        |

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

### Coaxial Connections

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

### Outline Drawing



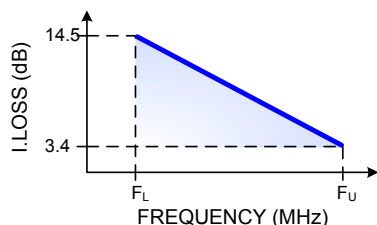
### Outline Dimensions (inch mm)

|       |       |       |       |      |       |      |       |
|-------|-------|-------|-------|------|-------|------|-------|
| A     | B     | C     | D     | E    | F     | G    | H     |
| 1.25  | 1.25  | .75   | .63   | .38  | 1.000 | .125 | 1.000 |
| 31.75 | 31.75 | 19.05 | 16.00 | 9.65 | 25.40 | 3.18 | 25.40 |

|    |    |      |       |       |       |      |       |
|----|----|------|-------|-------|-------|------|-------|
| J  | K  | L    | M     | N     | P     | Q    | wt    |
| -- | -- | .125 | 1.688 | 2.18  | .750  | .06  | grams |
| -- | -- | 3.18 | 42.88 | 55.37 | 19.05 | 1.52 | 70.0  |

### 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



CASE STYLE: H16

| Connectors           | Model       | Price       | Qty.  |
|----------------------|-------------|-------------|-------|
| SMA                  | ZEQ-3-222S+ | \$59.95 ea. | (1-9) |
| BRACKET (OPTION "B") |             | \$5.00 ea.  | (1+)  |

**+RoHS Compliant**

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

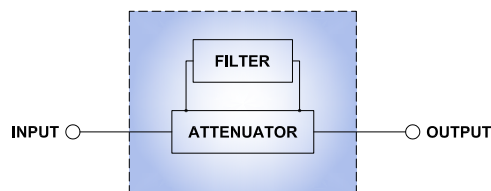
### Electrical Specifications at 25°C

| Parameter       | Condition    | Min. | Typ. | Max. | Units |
|-----------------|--------------|------|------|------|-------|
| Frequency Range | -            | 950  | -    | 2150 | MHz   |
| Insertion Loss  | 950 MHz      | 4.5  | -    | 5.9  | dB    |
|                 | 1500 MHz     | 1.9  | -    | 3.3  |       |
|                 | 2150 MHz     | 0.3  | -    | 1.7  |       |
| VSWR            | 950-2150 MHz | -    | 1.1  | 1.6  | :1    |

### Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR |
|-----------------|---------------------|------|
| 950.0           | 5.32                | 1.17 |
| 1000.0          | 5.07                | 1.17 |
| 1100.0          | 4.57                | 1.17 |
| 1200.0          | 4.08                | 1.17 |
| 1250.0          | 3.84                | 1.17 |
| 1300.0          | 3.60                | 1.16 |
| 1400.0          | 3.14                | 1.15 |
| 1500.0          | 2.70                | 1.14 |
| 1600.0          | 2.29                | 1.12 |
| 1750.0          | 1.75                | 1.09 |
| 1850.0          | 1.44                | 1.07 |
| 1900.0          | 1.31                | 1.06 |
| 2000.0          | 1.06                | 1.04 |
| 2100.0          | 0.86                | 1.02 |
| 2150.0          | 0.78                | 1.02 |

### Simplified Functional Schematic



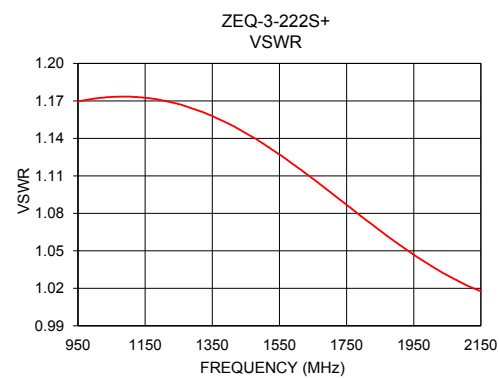
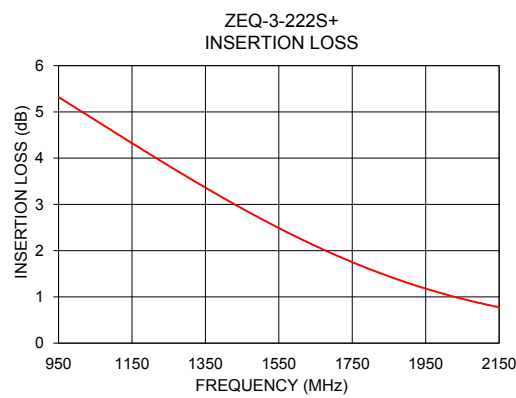
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