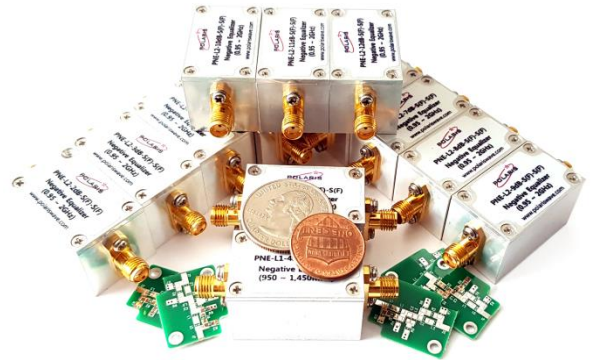


Description

The Polaris Gain Equalizer series is a negative slope equalizer that decreases attenuation linearly with frequency. This product family is used to compensate for the gain slope characteristics in communication equipment using broadband amplifiers such as L-band RF systems and wideband gateways.

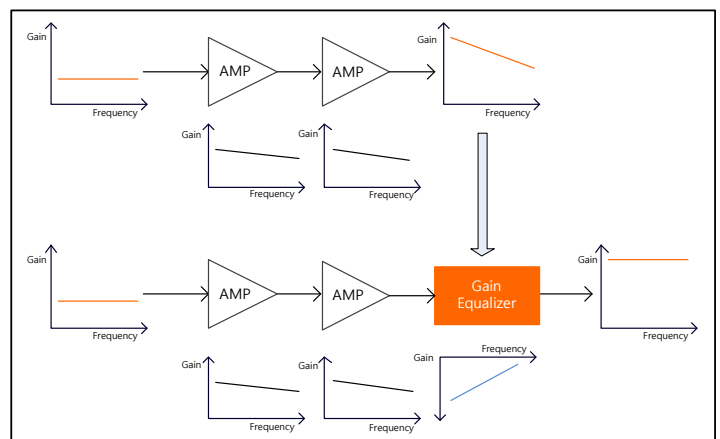


Features

- Two types of negative gain equalizers:
 - Surface mountable PCB (L x W x T): .59"[15] x .47"[12] x .02"[0.5]
 - Housing with SMA connectors (L x W x H): 1.30"[33] x .79"[20] x .80"[20.3]
- Excellent performance:
 - Frequency range: 950 MHz to 2,150 MHz,
 - Slope linearity: ± 0.75 dB max. (± 0.5 dB typ.),
 - VSWR: 1.67 : 1 max. (1.5 : 1 typ.),
 - Insertion loss at max. frequency: 1.75 dB max. (1.0 dB typ.),
 - Slope compensation range: 1 to 10dB
- Affordable price

Applications

- L-band converters
- Wideband routers and gateways
- Multi-band cellular phone signal repeaters
- DAS(Distributed Antenna Systems)
- RF transceiver modules

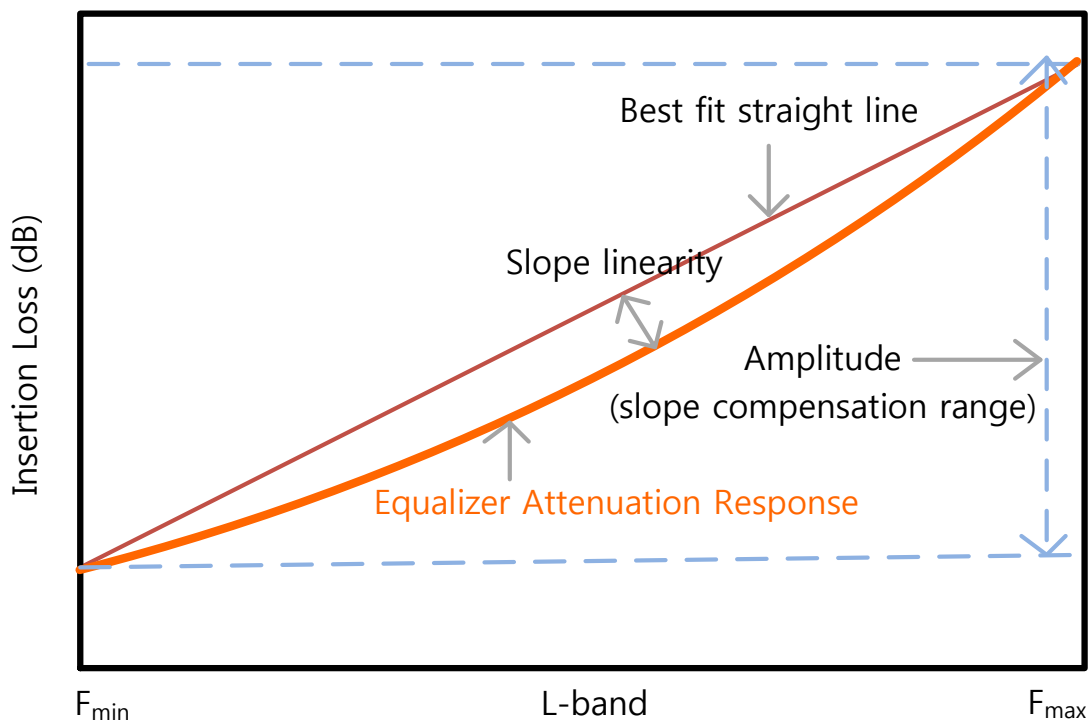


Specifications

Parameters	Specifications	
	Surface mountable PCB	Housing with SMA connectors
Frequency Range	L-band	L-band
Slope Shape	Negative Slope	Negative Slope
Insertion Loss at F_{max} (MHz)	1.5 dB (typ.), 1.75 dB (max.)	1.5 dB (typ.), 1.75 dB (max.)
Amplitude* (Slope Compensation Range)	1dB to 10dB (IL at F_{max} – IL at F_{min})**	1dB to 10dB (IL at F_{max} – IL at F_{min})**
Slope Linearity	± 0.5 dB (typ.), ± 0.75 dB (max.)	$\pm \pm 0.5$ dB (typ.), ± 0.75 dB (max.)
Input / Output VSWR	1.5 : 1 (typ.), 1.67 : 1 (max.)	1.5 : 1 (typ.), 1.67 : 1 (max.)
Impedance	50 Ω	50 Ω
RF Connector	-	SMA (Jack or Plug)
Size (L x W x H)	.59"[15] x .47"[12] x .02"[0.5]	1.30"[33] x .79"[20] x .80"[20.3]

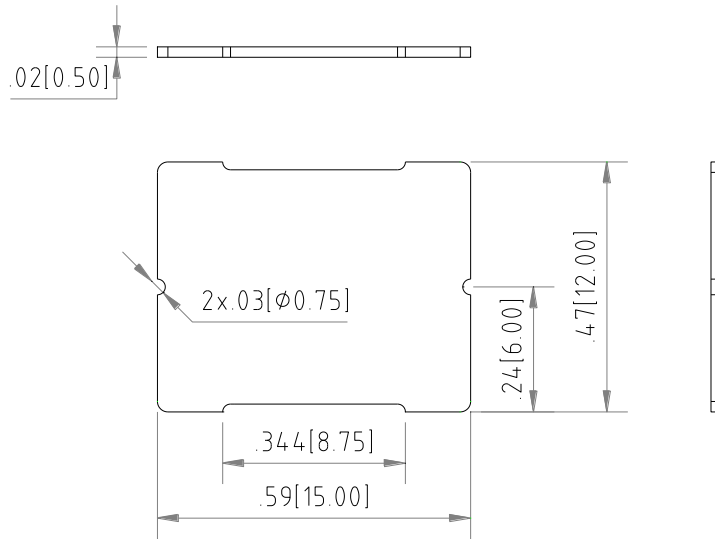
* Customizable. Please contact us for more details.

** IL: Insertion Loss

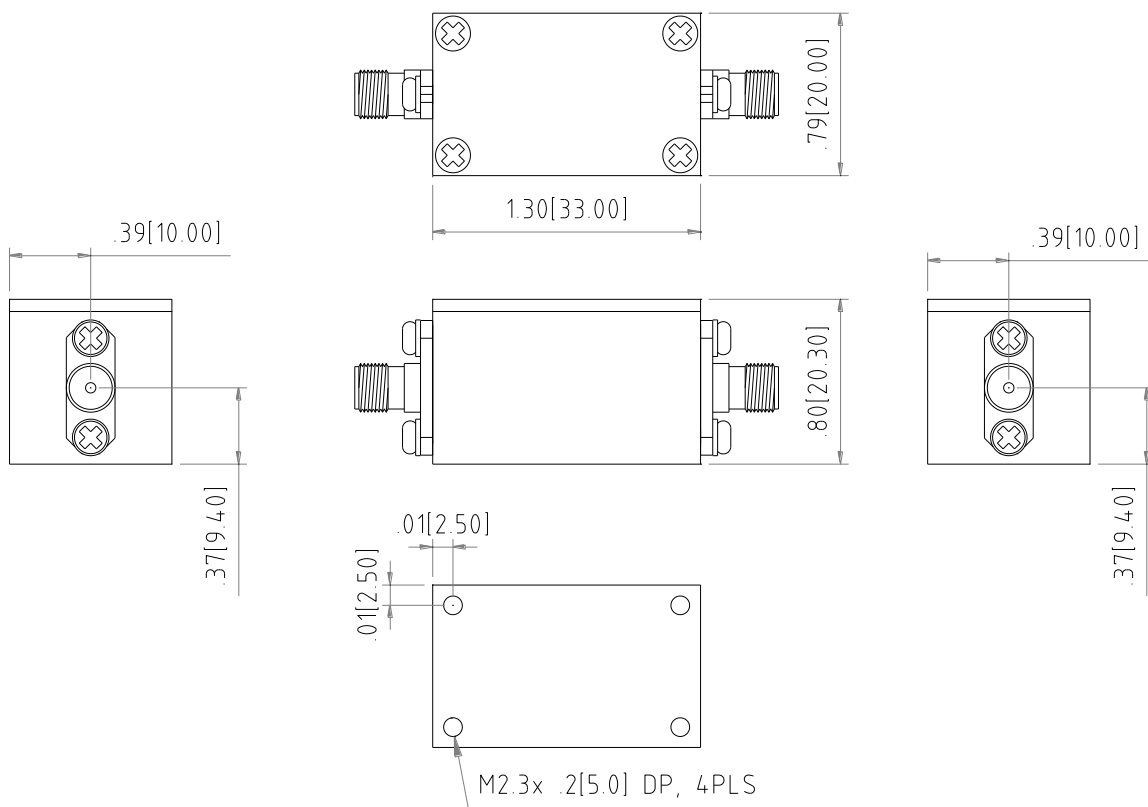


Outline Drawings

Dimensions shown in brackets [] are in millimeters.



Surface mountable PCB



Housing with SMA connectors

Ordering Information

❖ PNE-**ww**-**xxx**-**yz**

PNE: Polaris Negative Slope Equalizer

ww: Frequency Range

L1: 950 MHz to 1,450 MHz, L2: 950 MHz to 1,525 MHz

L3: 950 MHz to 1,750 MHz, L4: 950 MHz to 1,825 MHz

L5: 950 MHz to 1,950 MHz, L6: 950 MHz to 2,150 MHz

xxx: Amplitude (Slope Compensation Range)

dB value (Insertion Loss at F_{\max} – Insertion Loss at F_{\min})

- **y**: Product type

S: Surface mountable PCB

H: Housing with SMA connectors

- **z**: SMA connector configuration

F: Female / Female

M: Male / Male

Black: Surface mountable PCB

❖ Examples

▪ PNE-**L1-7R5-S**

L1: 950 MHz to 1,450 MHz

7R5: 7.5 dB

S: Surface mountable PCB

▪ PNE-**L6-010-HF**

L6: 950 MHz to 2,150 MHz

010: 10 dB

H: Housing with SMA connectors

F: Female / Female

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