



TYPICAL CHARACTERISTICS
ON
PCAN-218-10-SFF-LC

PMI MODEL: PCAN-218-10-SFF-LC IS A CURRENT CONTROLLED ATTENUATOR OPERATING OVER THE 2.0 TO 18.0 GHz FREQUENCY RANGE. THIS MODEL OFFERS AN INSERTION LOSS OF 5 dB MAXIMUM WHILE MAINTAINING A MAXIMUM ATTENUATION FLATNESS OF ± 5.0 dB. THIS COMPACT HOUSING MEASURES 2.25" x 1.60" x 0.60" AND IS OUTFITTED WITH FIELD REMOVABLE SMA FEMALE CONNECTORS.



May 15, 2020

Designed By: Dr.Ash(Ashok) Gorwara

**Tested By:
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TYPICAL CHARACTERISTICS ON PCAN-218-10-SFF-LC

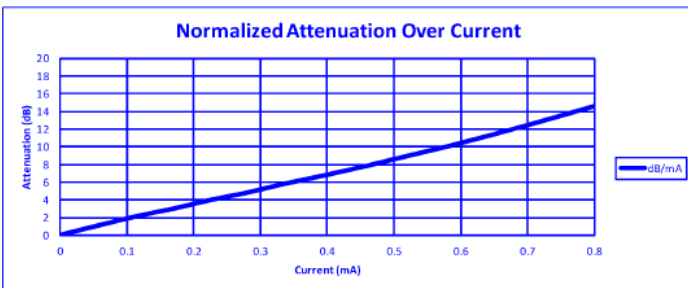
OUTLINE

DESCRIPTION

PMI MODEL: PCAN-218-10-SFF-LC IS A CURRENT CONTROLLED ATTENUATOR OPERATING OVER THE 2.0 TO 18.0 GHz FREQUENCY RANGE. THIS MODEL OFFERS AN INSERTION LOSS OF 5 dB MAXIMUM WHILE MAINTAINING A MAXIMUM ATTENUATION FLATNESS OF ± 5.0 dB. THIS COMPACT HOUSING MEASURES 2.25" x 1.60" x 0.60" AND IS OUTFITTED WITH FIELD REMOVABLE SMA FEMALE CONNECTORS.

SPECIFICATIONS

- FREQUENCY RANGE: 2.0 TO 18.0 GHz
- INSERTION LOSS: 5 dB MAXIMUM
- ATTENUATION: 10 dB MIN
- ATTENUATION FLATNESS: ± 5.0 dB MAX
- VSWR: 2.0:1 MAXIMUM
1.5:1 GOAL
- VOLTAGE CONTROL: SEE PLOT
- IMPEDANCE: 50 Ω
- POWER SUPPLY: +0-1 VDC @ 2 mA MAXIMUM
- CONNECTORS: FIELD REMOVABLE SMA FEMALE
- SIZE: 2.25" x 1.60" x 0.60"
(57.15 mm x 40.64 mm x 15.24 mm)
- FINISH: GOLD PLATED



ENVIRONMENTAL RATINGS

- TEMPERATURE: -55 °C TO +85 °C (OPERATING)
-65 °C TO +125 °C (STORAGE)
- HUMIDITY: UP TO 90%, NON-CONDENSING
- SHOCK: MIL-STD-202, METHOD 213B COND. B
- VIBRATION: MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202, METHOD 107D COND. A

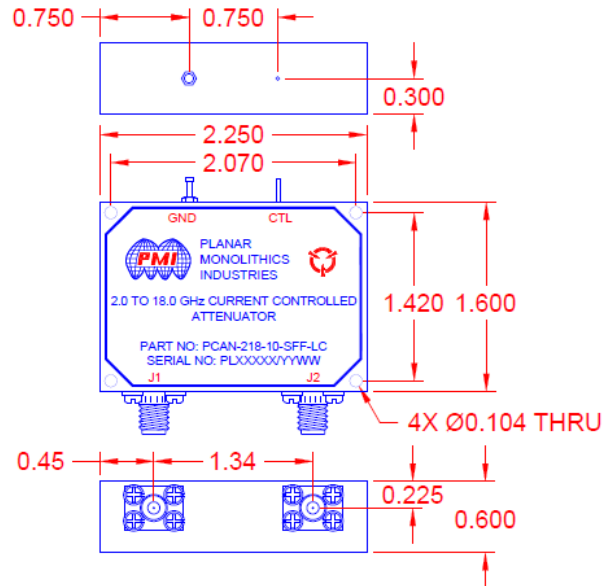
NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PMI CONFIDENTIAL AND PROPRIETARY

ALL DIMENSIONS
ARE IN INCHES (MM)
TOLERANCES:
X.XX ± 0.020
X.XXX ± 0.010

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	05/14/20	

MECHANICAL OUTLINE



PLANAR MONOLITHICS INDUSTRIES, INC.
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ISO 9001 CERTIFIED

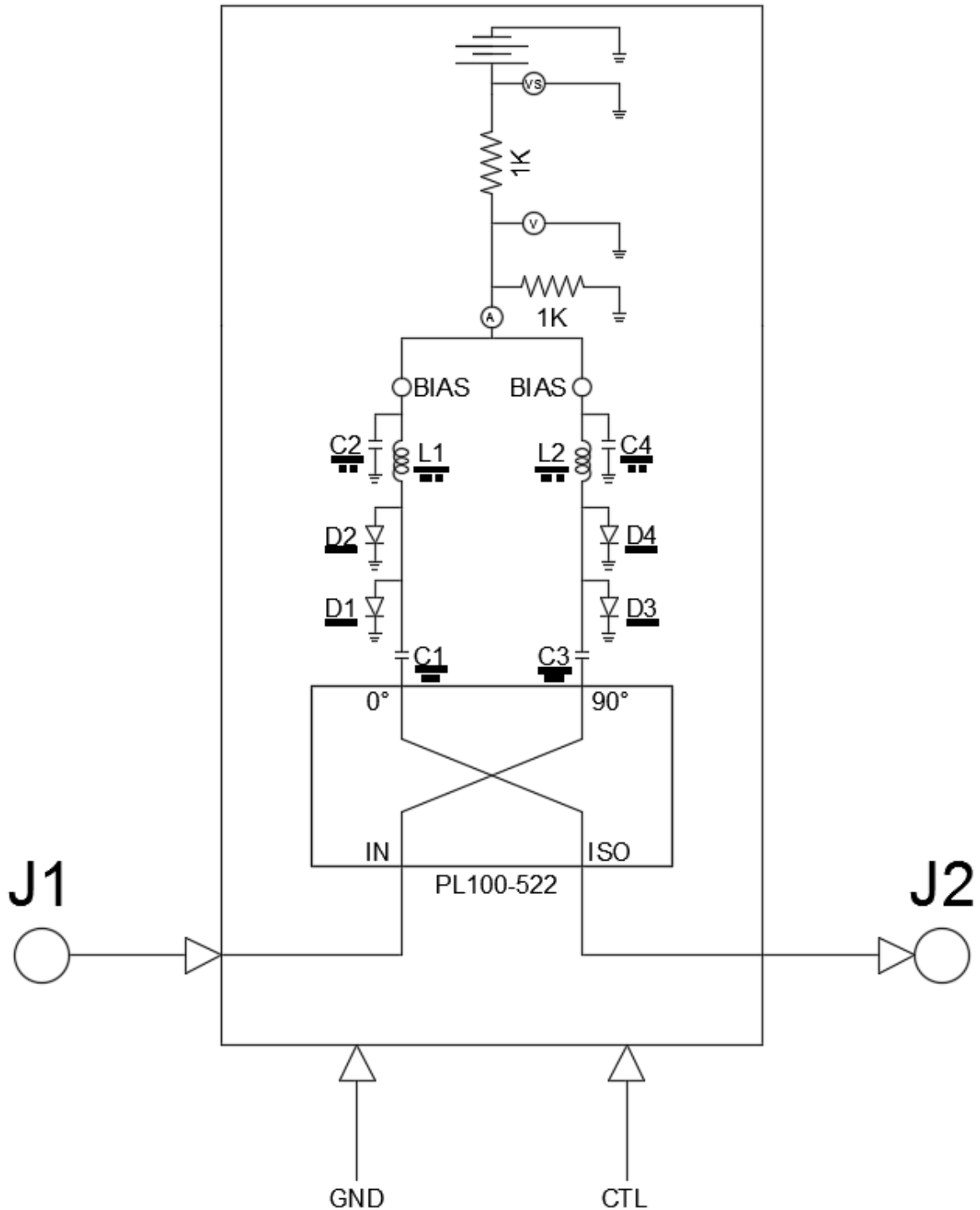


APPROVALS		DATE	TITLE			REV
DRAWN <i>S. RADIX</i>		05/14/20	PRODUCT FEATURE PCAN-218-10-SFF-LC			
CHECKED			SIZE A	FORM NO. 05XQ0	DWG NO. 27038860	REV A1
ISSUED			SCALE N:S		SHEET 1 OF 1	



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TEST SETUP





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TEST RESULTS

TEST. ITEM NO	<u>PARAMETERS</u>	SPECIFIED VALUE	ENVIRONMENTAL PARAMETERS	TEST RESULTS
1	Frequency Range:	2.0 GHz – 18.0 GHz See Plots	+25°C	2.0 GHz – 18.0 GHz
2	Insertion Loss	5.0 dB MAX. See Plots	+25°C	3.2 dB
3	Attenuation	10 dB MIN	+25°C	14.94 dB
4	Attenuation Flatness	± 5 dB Max	+25°C	3.92 dB
5	VSWR	1.5:1 Goal 2.0:1 MAX See Plots	+25°C	1.52:1
6	DC Supply	0-1.0 V 2 mA	+25°C	0.689 V @ 0.817 mA See Plots

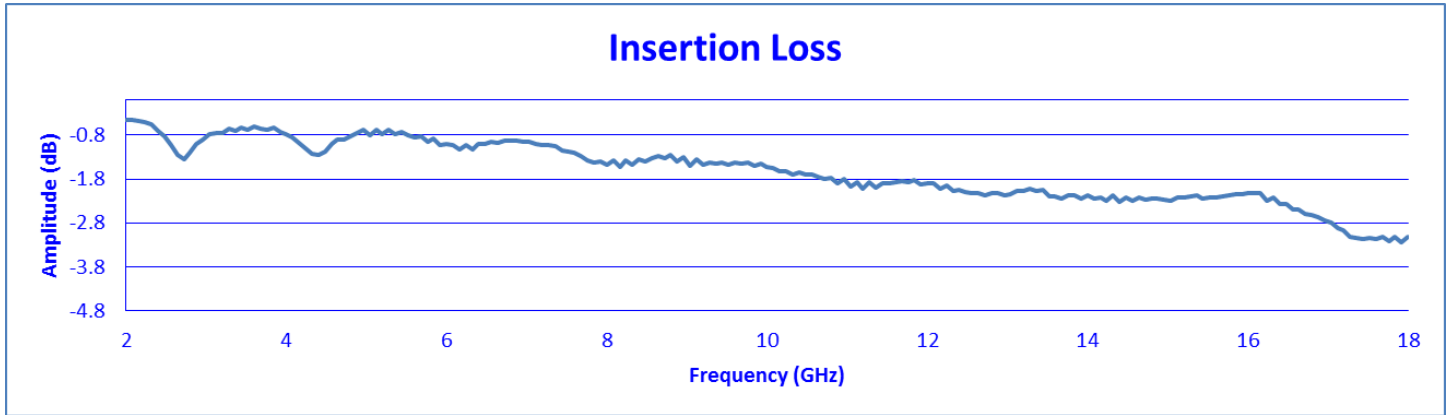
FLATNESS AT VARIOUS ATTENUATIONS.

0 dB	0.0 dB
3 dB	0.77 dB
6 dB	1.77 dB
9 dB	3.11 dB
10 dB	3.92 dB
12 dB	5.5 dB
13 dB	7.1 dB

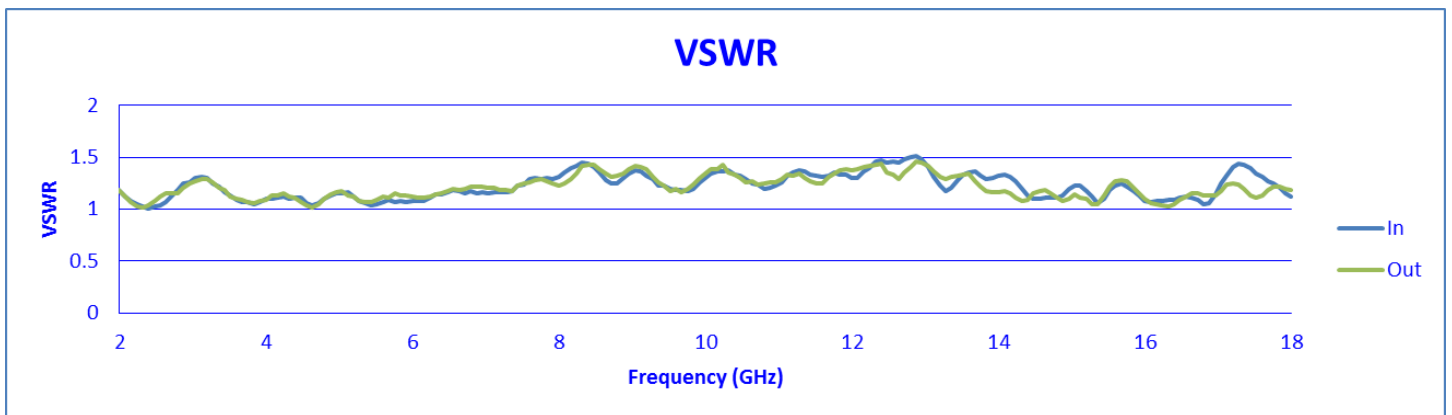


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INSERTION LOSS AT 25°C



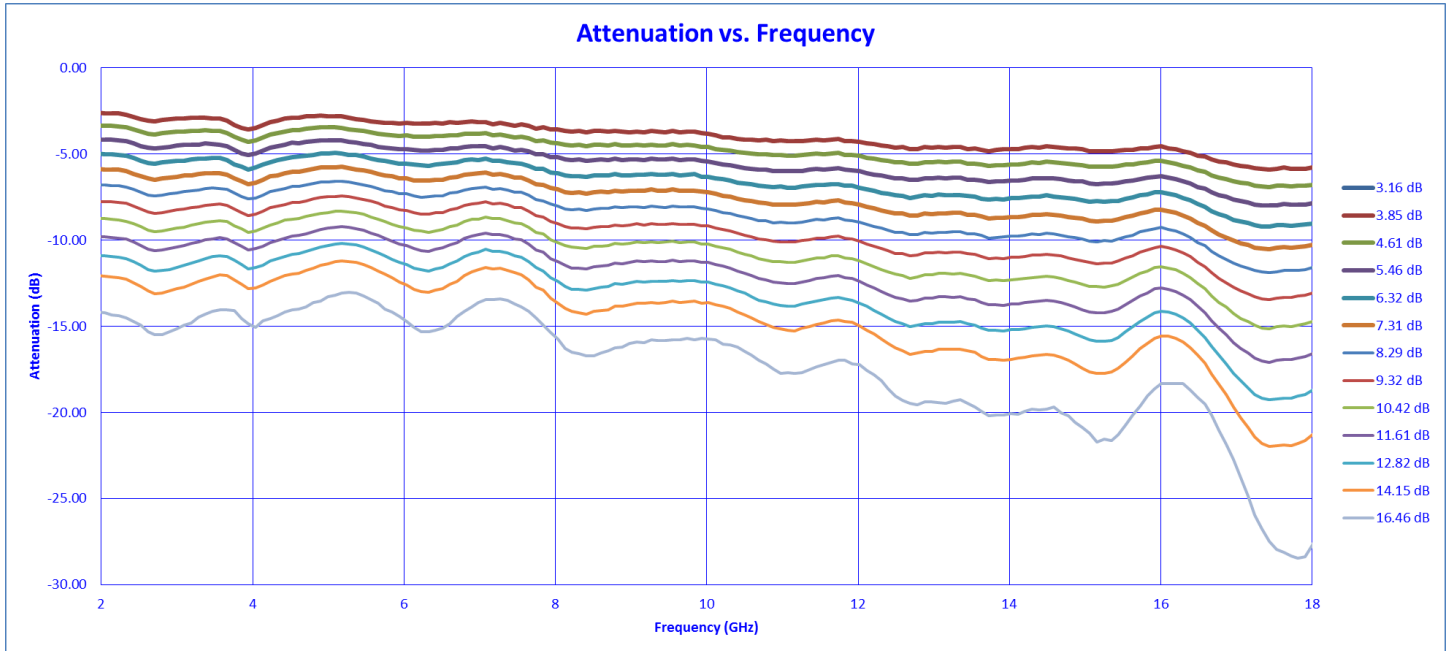
VSWR AT 25°C



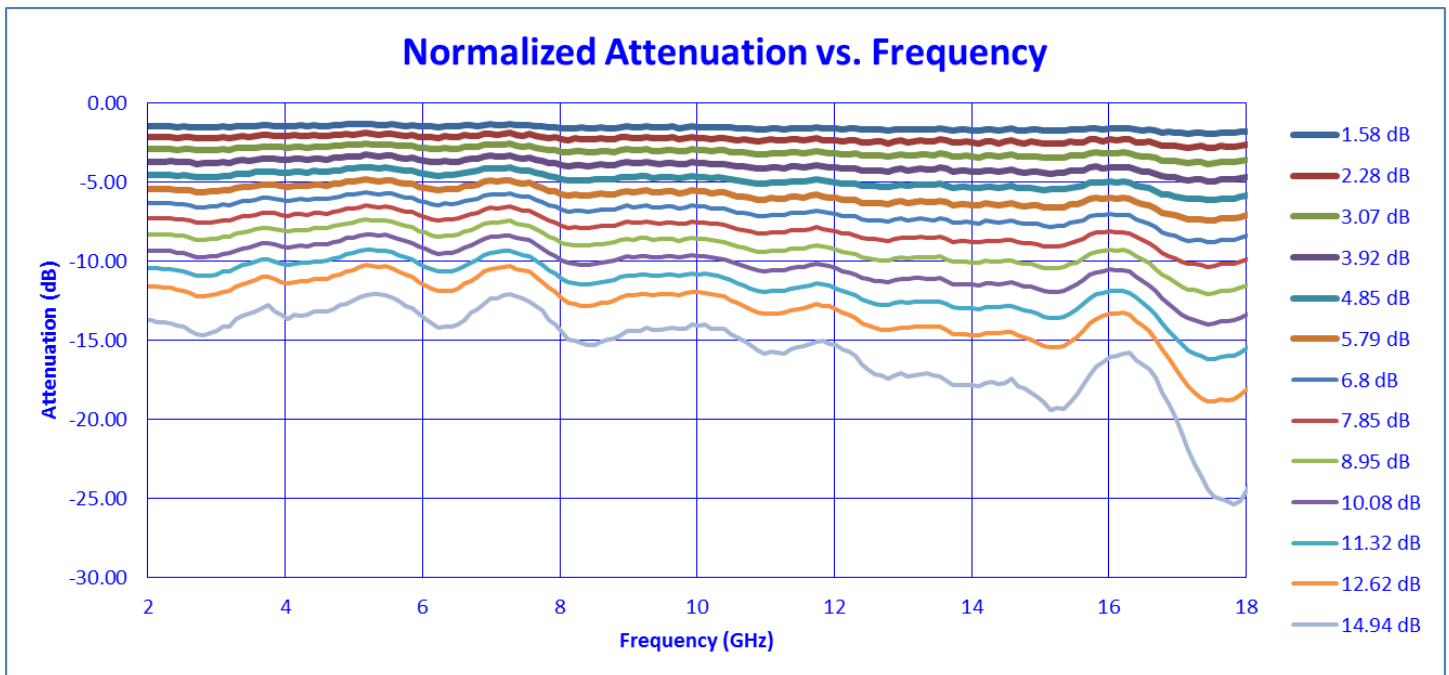


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ATTENUATION OVER FREQUENCY AT 25°C



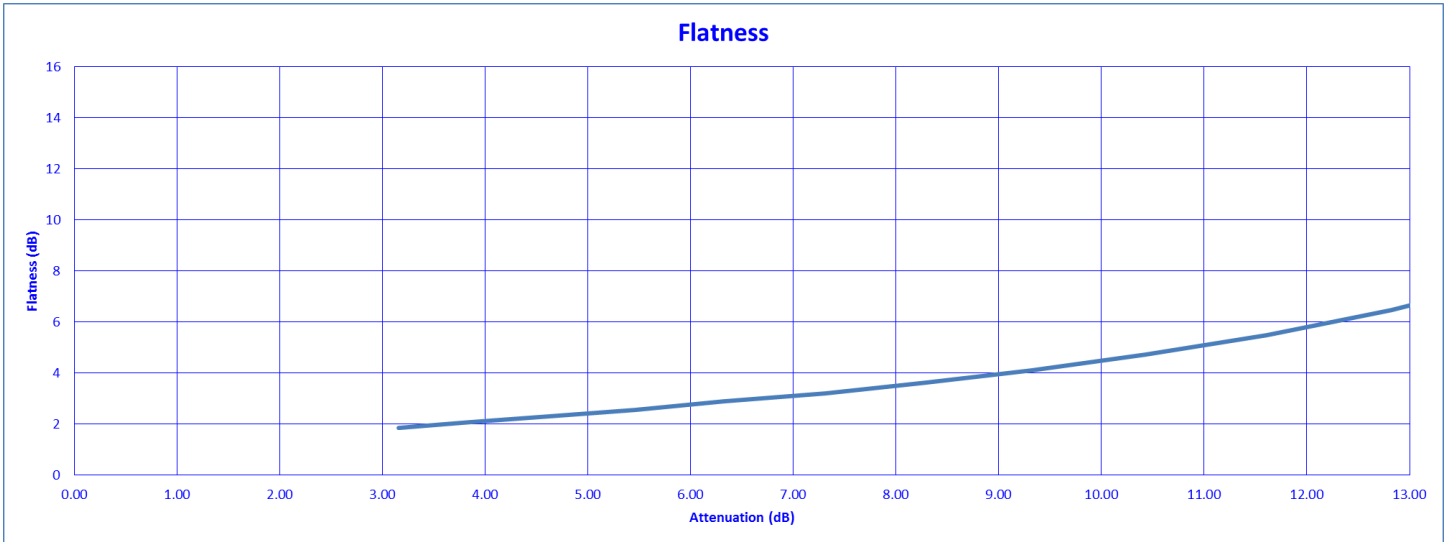
NORMALIZED ATTENUATION OVER FREQUENCY AT 25°C



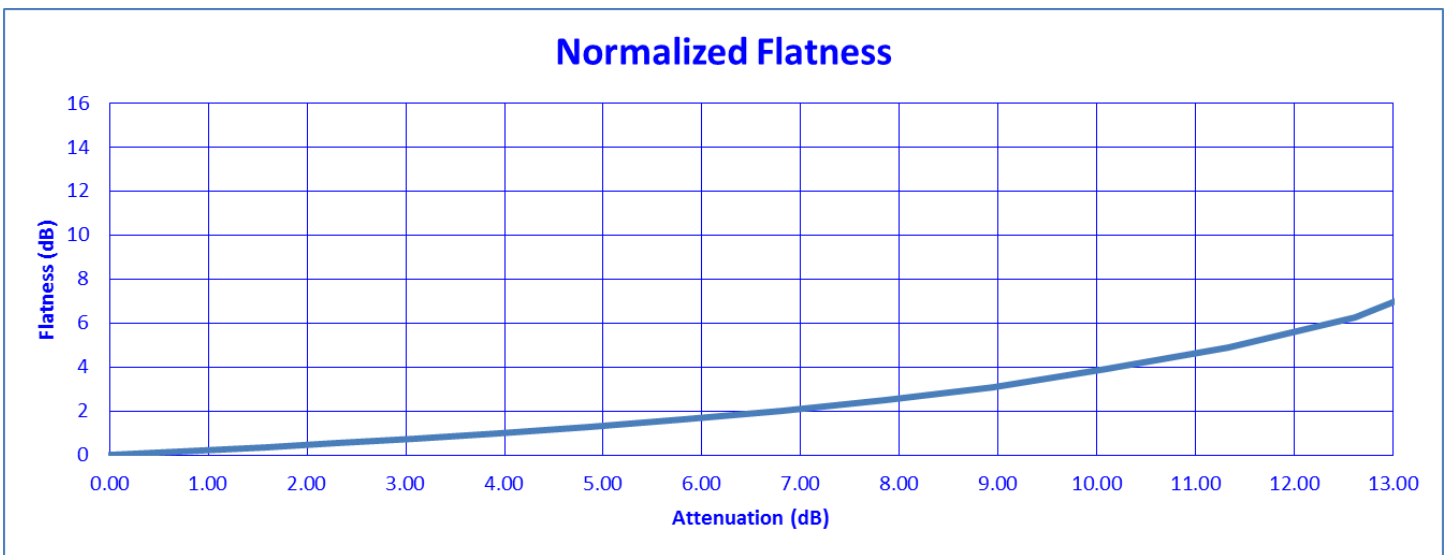


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FLATNESS AT 25°C



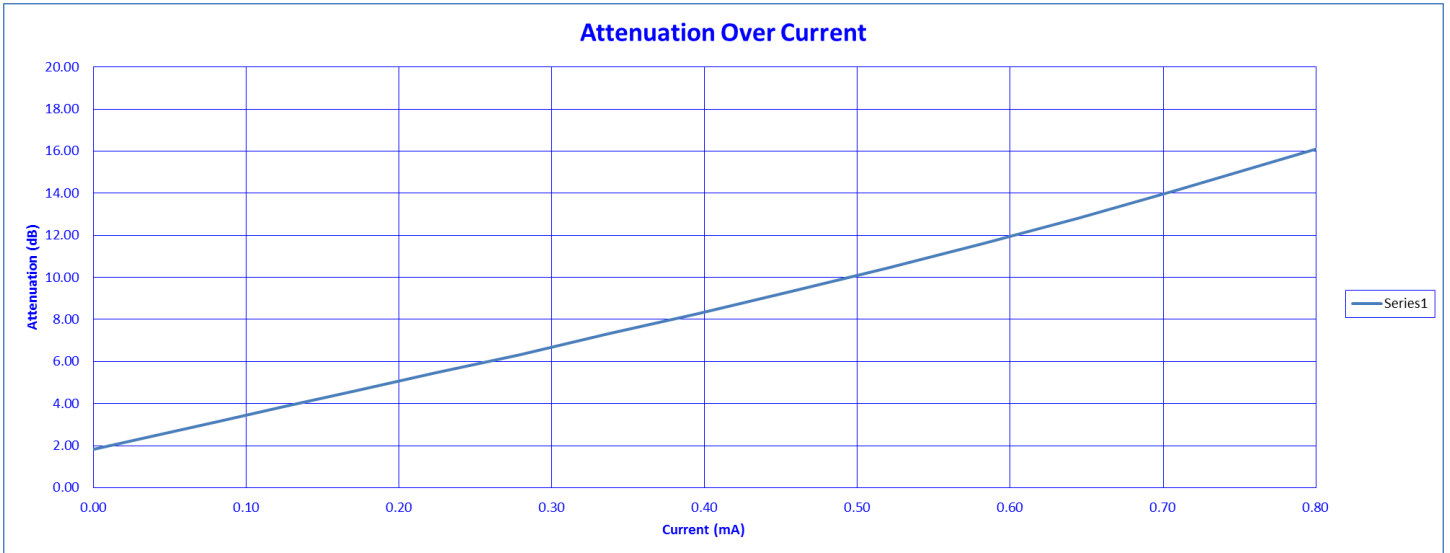
NORMALIZED FLATNESS AT 25°C





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ATTENUATION OVER CURRENT AT 25°C



NORMALIZED ATTENUATION OVER CURRENT AT 25°C

