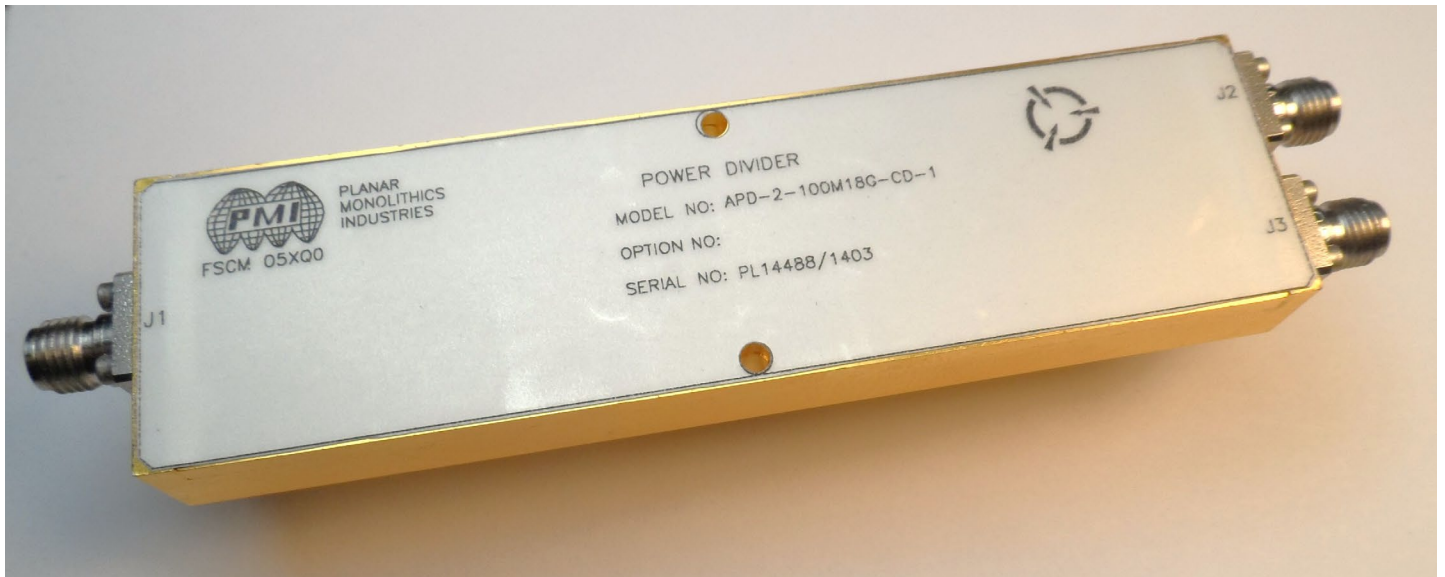




**TYPICAL CHARACTERISTICS
ON
APD-2-100M18G-CD-1**

**PMI MODEL APD-2-100M18G-CD-1 IS A TWO WAY POWER DIVIDER
FEATURING HIGH ISOLATION, LOW INSERTION LOSS AND LOW VSWR.**



JANUARY 15, 2014

DESIGNED BY: PMI ENGINEERING

TESTED AND REPORTED BY: Randy Combs

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com



TYPICAL CHARACTERISTICS ON APD-2-100M18G-CD-1

DESCRIPTION

PMI MODEL APD-2-100M18G-CD-1 IS A TWO WAY POWER DIVIDER FEATURING HIGH ISOLATION, LOW INSERTION LOSS, AND LOW VSWR. IT IS DESIGNED FOR BROADBAND USE AND HIGH RELIABILITY.

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	1	ORIGINAL RELEASE	11/20/13
	A1	ECN # 14-0035	02/24/14

SPECIFICATIONS

- FREQUENCY RANGE:.....0.1 TO 18 GHz
- INSERTION LOSS:.....0.1 TO 8.0 GHz, 1.85dB TYPICAL
8.0 TO 18 GHz, 3.5dB TYPICAL
- VSWR:.....0.1 TO 0.5 GHz, 2.0:1 TYPICAL
0.5 TO 8.0 GHz, 1.5:1 TYPICAL
8.0 TO 18 GHz, 1.6:1 TYPICAL
- ISOLATION:.....0.1 TO 0.5 GHz, 6dB TYPICAL
0.5 TO 8.0 GHz, 16.5dB TYPICAL
8.0 TO 18 GHz, 21.0dB TYPICAL
- AMPLITUDE BALANCE:.....0.1 TO 8.0 GHz, ±0.2dB TYPICAL
8.0 TO 18 GHz, ±0.45dB TYPICAL
- PHASE BALANCE:.....0.1 TO 8.0 GHz, ±4° TYPICAL
8.0 TO 18 GHz, ±5° TYPICAL
- AVERAGE POWER INTO LOAD VSWR:
1.2:1.....25 WATTS
2.0:1.....7.5 WATTS
∞:1.....0.75 WATTS
- SIZE:.....3.75" (L) x 1.00" (W) x 0.40" (H)
- FINISH:.....GOLD PLATED

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

ENVIRONMENTAL RATINGS:

- TEMPERATURE:.....-55°C TO +65°C (OPERATING)
-65°C TO +125°C (STORAGE)
- HUMIDITY:.....MIL-STD-202F, METHOD 103B COND. B
- SHOCK:.....MIL-STD-202F, METHOD 213B COND. B
- VIBRATION:.....MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE:.....MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE:.....MIL-STD-202F, METHOD 107D COND. A

PLANAR MONOLITHICS INDUSTRIES, INC.
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E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
XXX ±0.020
XXX ±0.010

APPROVALS		DATE		TITLE	
DRN:	<i>fgp</i>		11/20/13	PRODUCT FEATURE	
REV:		APD-2-100M18G-CD-1			
ESN:		0.1 - 18 GHz 2 WAY POWER DIVIDER			
		SIZE	FORM NO.	QWG NO.	REV.
		A	05XQ0	27021531	A1
		SCALE	N:S		SHEET 1 OF 3



**TYPICAL CHARACTERISTICS
ON
APD-2-100M18G-CD-1**

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE J2	MEASURED VALUE J3	QA QC
1	Frequency Range:	0.1 to 18.0GHz	0.1 to 18.0GHz (See Plot)		
2	Insertion Loss:	0.1to 8.0 GHz: 1.85dB Typ. 8.0 to 18 GHz: 3.5dB Typ.	1.7 dB (See Plot) 3.1 dB (See Plot)	1.8 dB (See Plot) 3.4 dB (See Plot)	
3	VSWR:	0.1 to 0.5 GHz: 2.0:1 Typ. 0.5 to 8.0 GHz: 1.5:1 Typ. 8.0 to 18 GHz: 1.6:1 Typ.	1.85:1 (See Plot) 1.5:1 (See Plot) 1.54:1 (See Plot)	1.84:1 (See Plot) 1.45:1 (See Plot) 1.54:1 (See Plot)	
4	Isolation:	0.1 to 0.5 GHz: 6dB Typ. 0.5 to 8.0 GHz: 16.5dB Typ. 8.0 to 18 GHz: 21.0dB Typ.	5.4 dB (See Plot) 18.7 dB (See Plot) 20.9 dB (See Plot)		
5	Amplitude Balance:	0.1 to 8.0 GHz: ±0.2dB Typ. 8.0 to 18 GHz: ±0.45dB Typ.	±0.10 dB (See Plot) ±0.33 dB (See Plot)		
6	Phase Balance	0.1 to 8.0 GHz: ±4 deg.	±1.8 deg. (See Plot)		

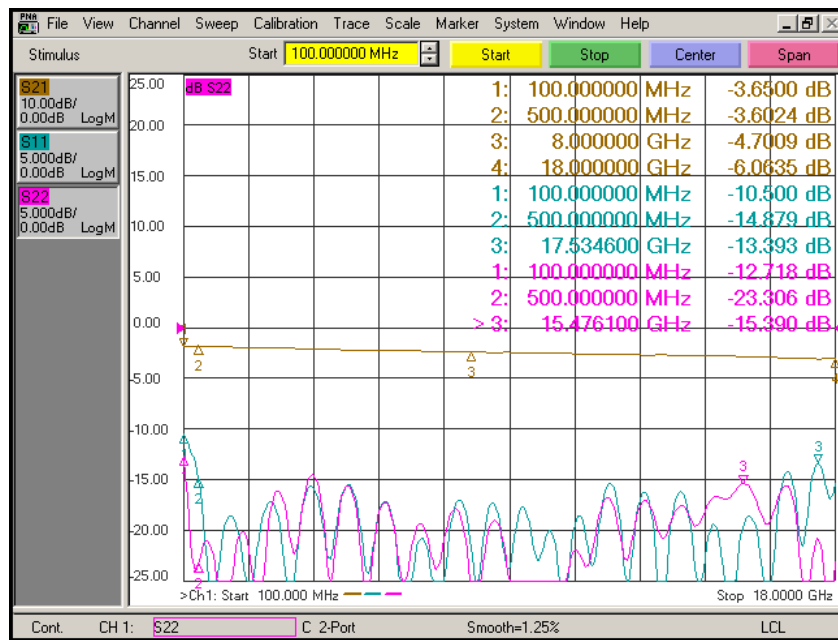
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**TYPICAL CHARACTERISTICS
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		8.0 to 18 GHz: ±5 deg.	±3.9 deg. (See Plot)
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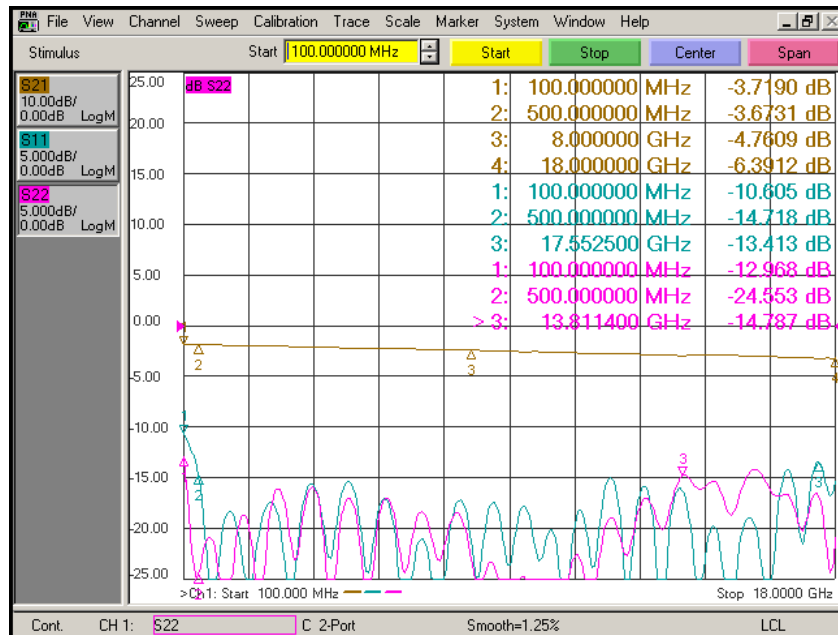
**J1 to J2
Insertion Loss & Return Loss**



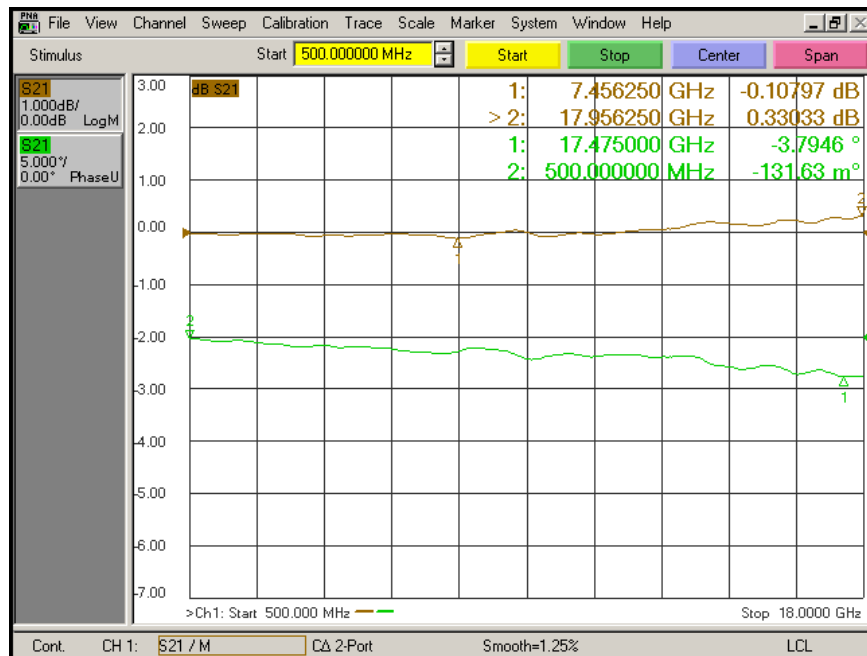
**J1 to J3
Insertion Loss & Return Loss**



**TYPICAL CHARACTERISTICS
ON
APD-2-100M18G-CD-1**



Amplitude Balance & Phase Balance J2 to J3



Isolation J2 to J3

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TYPICAL CHARACTERISTICS ON APD-2-100M18G-CD-1

