Here's What's New...

New Product Releases from Planar Monolithics Industries, Inc.
March 29, 2019
Passive and Active Power Dividers

1.0 PMI Model No. APD-2-100M18G-CD-1, 0.1 to 18.0 GHz, 2-Way Power Divider

PMI Model No. APD-2-100M18G-CD-1 is a 2-Way Power Divider that operates over the frequency range of 0.1 to 18.0 GHz. It has a typical insertion loss of 1.85 dB from 0.1 to 8.0 GHz and a typical insertion loss of 3.5 dB from 8.0 to 18.0 GHz. It also has a typical isolation of 6 dB from 0.1 to 0.5 GHz, a typical isolation of 16.5 dB from 0.5 to 8.0 GHz, and a typical isolation of 21 dB from 8.0 to 18.0 GHz. This model is outfitted with SMA female connectors in a housing measuring 3.75" x 1.00" x 0.40".

- Frequency Range: 0.1 to 18.0 GHz
- Insertion Loss:
  - 1.85 dB Typ. (0.1 to 8.0 GHz) - Measured 1.7 dB
  - 3.5 dB Typ. (8.0 to 18.0 GHz) - Measured 3.1 dB
- VSWR:
  - 2.0:1 Typ. (0.1 to 0.5 GHz) - Measured 1.84:1
  - 1.5:1 Typ. (0.5 to 8.0 GHz) - Measured 1.45:1
  - 1.6:1 Typ. (8.0 to 18.0 GHz) - Measured 1.54:1
- Isolation:
  - 6 dB Typ. (0.1 to 0.5 GHz) - Measured 5.4 dB
2.0 PMI Model No. APD-2-2G18G-SFF-1W, 2.0 to 18.0 GHz, 2-Way Power Divider

PMI Model No. APD-2-2G18G-SFF-1W is a 2-Way Power Divider operating over the frequency range of 2.0 to 18.0 GHz. This model has a minimum isolation of 15 dB and a maximum insertion loss of 1.0 dB. It is outfitted with SMA female connectors in a package that measures 1.63" x 1.00" x 0.38".

- Frequency Range: 2.0 to 18.0 GHz
- Insertion Loss: 1.0 dB Max. - Measured 0.69 dB
- VSWR: 1.5:1 Max. - Measured 1.48:1
- Isolation: 15 dB Min. - Measured 17.01 dB
- Amplitude Balance: 0.5 dB Max. - Measured +0.025 dB/-0.27 dB
- Phase Balance: 5° Max. - Measured -0.5°
- Reverse Power Handling: 1 Watt Min. - Measured 1 Watt, Tested up to 10 Watts
- Amplitude Change Over Temperature (10°C to 50°C): 0.5 dB Max. - Measured +0.028 dB/-0.063 dB
- Phase Change Over Temperature (10°C to 50°C): ±5° Max. - Measured +1.6°/-3.81°

3.0 PMI Model No. APD-2-18G40G-20W-292FF, 18.0 to 40.0 GHz, 2-Way Power Divider

PMI Model No. APD-2-18G40G-20W-292FF is a 18.0 to 40.0 GHz, 2-Way Power Divider that has a minimum isolation of 18 dB and a maximum insertion loss (above 3.0 dB) of 1.5 dB. This model is supplied in a housing measuring 1.06" x 0.85" x 0.50" with 2.92 mm female connectors.

- Frequency Range: 18.0 to 40.0 GHz
- Insertion Loss (Above 3.0 dB): 1.5 dB Max. - Measured 1.14 dB
- Isolation: 18 dB Min. - Measured 21 dB
- VSWR: 1.6:1 - Measured 1.47:1
- Amplitude Balance: ±0.3 dB Max. - Measured +0.20 dB
- Phase Balance: ±4° Max. - Measured -1.17°
- Power Handling: 20 Watts CW Max., 3 kW Peak Max.
- Impedance: 50 Ohms
4.0 PMI Model No. APD-4-2G26G-292FF-1W, 2.0 to 26.0 GHz, 4-Way Power Divider

PMI Model No. APD-4-2G26G-292FF-1W is a 2.0 to 26.0 GHz, 4-Way Power Divider. It has a maximum insertion loss of 2.25 dB and a minimum isolation of 15 dB. This model is outfitted with 2.92 mm female connectors in a housing that measures 3.000" x 2.000" x 0.375".

- Frequency Range: 2.0 to 26.0 GHz
- Insertion Loss: 2.25 dB Max. - Measured 1.69 dB
- VSWR In/Out: 1.6:1 Max. - Measured 1.61:1/1.55:1
- Isolation: 15 dB Min. - Measured 17.4 dB
- Amplitude Balance: ±0.5 dB Max. - Measured +0.36 dB/-0.16 dB
- Phase Balance: ±6° Max. - Measured +2.07°/-0.00
- Amplitude Change Over Temperature Range: 0.5 dB Max.
- Phase Change Over Temperature Range: 7.5° Max.
- Reverse Power Handling: 1 Watt CW Min.

5.0 PMI Model No. APD-4-26D5G40G-20W-292FF, 26.5 to 40.0 GHz, 4-Way Power Divider

PMI Model No. APD-4-26D5G40G-20W-292FF is a 4-Way Power Divider that operates over the frequency range of 26.5 to 40.0 GHz. It has a maximum insertion loss (above 6.0 dB) of 2.4 dB and a minimum isolation of 18 dB. This housing measures 2.06" x 1.50" x 0.50" and is outfitted with 2.92 mm female connectors.

- Frequency Range: 26.5 to 40.0 GHz
- Insertion Loss (Above 6.0 dB): 2.4 dB Max. - Measured 1.52 dB
- Isolation: 18 dB Min. - Measured 31.4 dB
- VSWR In/Out: 1.6:1 Max. - Measured 1.46:1/1.5:1
- Amplitude Balance: ±0.4 dB Max. - Measured ±0.09 dB
- Phase Balance: ±5° Max. - Measured ±0.27°
- Power Handling In/Out: 20 Watts Max./0.5 Watts Max.
- Impedance: 50 Ohms

6.0 PMI Model No. APD-4-500M18G-SFF-30W, 0.5 to 18.0 GHz, 4-Way Power Divider
PMI Model No. APD-4-500M18G-SFF-30W is a 0.5 to 18.0 GHz, 4-Way Power Divider. It has a minimum isolation of 12 dB from 0.5 to 0.6 GHz and a minimum isolation of 14 dB from 0.6 to 18.0 GHz. This model also has a maximum insertion loss (above 3.01 dB) of 5.5 dB. It is outfitted with SMA female connectors in a housing that measures 7.092" x 2.764" x 0.394".

- Frequency Range: 0.5 to 18.0 GHz
- Insertion Loss (Above 3.01 dB): 5.5 dB Max. - Measured 5.26 dB
- VSWR In/Out: 1.9:1 Max./1.7:1 Max. - Measured 1.65:1/1.50:1
- Isolation:
  - 12 dB Min. (0.5 to 0.6 GHz) - Measured 12.5 dB
  - 14 dB Min. (0.6 to 18.0 GHz) - Measured 17.22 dB
- Amplitude Balance: ±0.6 dB Max. - Measured +0.36 dB Max./-0.24 dB Min.
- Phase Balance: ±6° Max. - Measured +1.95° Max./-2.10° Min.
- Power Handling:
  - Forward: 30 Watts Max.
  - Reversed: 1 Watt Max.
- Impedance: 50 Ohms

PMI Website Link,
https://www.pmi-rf.com/product-details/apd-4-500m18g-sff-30w

7.0 PMI Model No. PD-16-0D5G18D0G-SFF, 0.5 to 18.0 GHz, 16-Way Power Divider

PMI Model No. PD-16-0D5G18D0G-SFF is a 16-Way Power Divider that operates over the frequency range of 0.5 to 18.0 GHz. It has a maximum insertion loss of 12 dB, as well as a minimum isolation of 12 dB from 0.5 to 0.6 GHz and a minimum isolation of 14 dB from 0.6 to 18.0 GHz. This model is outfitted with SMA female connectors in a housing measuring 7.88" x 12.39" x 0.74".

- Frequency Range: 0.5 to 18.0 GHz
- Insertion Loss: 12 dB Max. - Measured 10.15 dB
- Isolation:
  - 12 dB Min. (0.5 to 0.6 GHz) - Measured 15.95 dB
  - 14 dB Min. (0.6 to 18.0 GHz) - Measured 15.95 dB
- VSWR:
  - In: 2.50:1 Max. (0.5 to 1.0 GHz) - Measured 1.67:1
  - In: 2.00:1 Max. (1.0 to 18.0 GHz) - Measured 1.67:1
  - Out: 1.80:1 Max. - Measured 1.67:1
- Amplitude Balance: ±1.5 dB Max. - Measured +1.25 dB/-0.85 dB
- Phase Balance: ±9° Max. - Measured +7°/-5°
- Power Handling:
  - Forward: 10 Watts Max.
  - Reversed: 0.5 Watts max.
- Impedance: 50 Ohms

PMI Website Link,
https://www.pmi-rf.com/product-details/pd-16-0d5g18d0g-sff

8.0 PMI Model No. APD-4-20M6G-28V, 20 MHz to 6.0 GHz, 4-Way Amplified
Power Divider

PMI Model No. APD-4-20M6G-28V is an Amplified 4-Way Power Divider operating over the frequency range of 20 MHz to 6.0 GHz. It has a maximum gain of 3.5 dB ± 2 dB and a maximum survival input power of 33 dBm. This model is supplied in a housing measuring 2.0" x 2.0" x 0.4" and has SMA female connectors, along with a 9-Pin Micro-D connector.

- Frequency Range: 20 MHz to 6.0 GHz
- Gain: 3.5 dB ± 2 dB Max.
  - Measured 3.5 dB ± 1.07 dB J1 Max.
  - Measured 3.5 dB ± 1.05 dB J2 Max.
  - Measured 3.5 dB ± 0.94 dB J3 Max.
  - Measured 3.5 dB ± 0.91 dB J4 Max.
- VSWR: 2.5:1 Max.
  - Measured 1.70:1 dB J1 Max.
  - Measured 1.69:1 dB J2 Max.
  - Measured 1.70:1 dB J3 Max.
  - Measured 1.66:1 dB J4 Max.
  - Measured 2.27:1 dB J5 Max.
- Noise Figure:
  - 5.5 dB Max. (70 MHz to 3.0 GHz)
  - 6 dB Typ. (20 MHz to 6.0 GHz)
  - Measured 4.4 dB, 4.7 dB J1 Max.
  - Measured 4.5 dB, 4.8 dB J2 Max.
  - Measured 4.7 dB, 4.6 dB J3 Max.
  - Measured 4.6 dB, 4.8 dB J4 Max.
- Output Power P1dB:
  - 10 dBm Typ. (20 MHz to 3.0 GHz)
  - 9 dBm Typ. (3.0 to 6.0 GHz)
  - Measured 11.50 dB, 11.42 dB J1 Max.
  - Measured 11.44 dB, 11.33 dB J3 Max.
- Input Power: 33 dBm Max. (Survival)
- Power Supply: +28 V @ +200 mA Max. - Measured 75 mA Max.

PMI Website Link,
https://www.pmi-rf.com/product-details/apd-4-20m6g-28v

9.0 PMI Model No. APD-8-100M-28V, 100 MHz, 8-Way Amplified Power Divider

PMI Model No. APD-8-100M-28V is an Amplified 8-Way Power Divider that operates at the frequency range of 100 MHz. This model has a typical output port to port isolation of 25 dB and a maximum insertion loss of 4 ± 1.5 dB. It is outfitted with SMA female connectors in a housing measuring 4.00" x 2.00" x 0.55".

- Frequency: 100 MHz
- Insertion Loss: 4 ± 1.5 dB Max. - Measured 3.1 dB
- VSWR In/Out: 2:1 Max. - Measured 1.1:1/1.25:1
- Noise Figure: 9 dB Max., 6 dB Goal - Measured 7.9 dB
10.0 PMI Model No. APD-8-30M6G-SFF, 30 MHz to 6.0 GHz, 8-Way Amplified Power Divider

PMI Model No. APD-8-30M6G-SFF is a 30 MHz to 6.0 GHz, Amplified 8-Way Power Divider. It has a minimum isolation of 32 dB and a maximum insertion loss of 8 dB. This model is supplied in a housing that measures 4.50" x 4.50" x 0.50" and has SMA female connectors.

- Frequency Range: 30 MHz to 6.0 GHz
- Outputs (J1-J8) to Input (J9) Isolation: 32 dB Min., 36 dB Nominal - Measured 41 dB
- Insertion Loss: 4 dB Min., 6 dB Nominal, 8 dB Max. - Measured 6.5 dB
- Insertion Loss Flatness: ±1 dB Typ.
- Noise Figure: 6.5 dB Typ.
- VSWR In/Out: 2.0:1 Max. - Measured 1.88:1/1.49:1
- Input P1dB: -2.5 dBm Typ.
- Power Rating: +10 dBm Max.
- DC Voltage: +12 to +15 VDC @ 100 mA Nominal - Measured 48 mA

PMI Website Link,
https://www.pmi-rf.com/product-details/apd-8-30m6g-sff

11.0 PMI Model No. APD-7-328M335R5M-TNC, 328 to 335.5 MHz, 7-Way Uneven Power Divider

PMI Model No. APD-7-328M335R5M-TNC is a 7-Way Power Divider that operates over the frequency range of 328 to 335.5 MHz. It has a maximum insertion loss of 1.2 dB and a minimum isolation of 20 dB. This model is outfitted with TNC female connectors in a hermetic/con-formal coated housing measuring 7.500" x 6.000" x 0.945".

- Frequency Range: 328 to 335.5 MHz
- Insertion Loss: 1.2 dB Max.
- VSWR: 1.15:1 Max. - Measured 1.05:1
- Isolation: 20 dB Min. - Measured 37 dB
- Amplitude Balance: ±0.2 dB Max. - Measured ±0.08 dB
- Phase Balance: ±2° Max. - Measured ±0.9°
- Power Handling
  - Forward: 15 Watts Max.
  - Reversed: 1 Watt Max.
- Impedance: 50 Ohms

PMI Website Link,
https://www.pmi-rf.com/product-details/apd-7-328m335r5m-tnc
12.0 PMI Model No. PD-CD-001-1, 9.3 to 9.9 GHz, 4-Way Uneven Power Divider

PMI Model No. PD-CD-001-1 is a 9.3 to 9.9 GHz, 4-Way Power Divider. This model has a maximum insertion loss of 8.0 dB and a power input of 28 Watts CW, 750 Watts Peak. It is supplied in a housing measuring 2.35” x 1.70” x 0.5” with SMA female connectors.

- Frequency Range: 9.3 to 9.9 GHz
- Phase Balance: ±7° Max. - Measured 4° Max.
- Amplitude Balance: ±0.5 dB Max. - Measured ±0.2 dB Max.
- Insertion Loss: 8.0 dB Max. - Measured 6.97 dB Max.
- Power Input: 28 Watts CW, 750 Watts Peak (1.5 kW Goal)
- VSWR Input/Output: 1.5:1 Typ., 2.0:1 Max. - Measured 1.6:1 Max.
- Impedance: 50 Ohms

PMI Website Link,

*** For more information on PMI's complete line of products, please visit ***
http://www.pmi-rf.com

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Sincerely,

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