Here's What's New...
New Product Releases & Product Updates
May 9, 2016

*** NEW RELEASES ***
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1.0 PMI Model No.: PS-204-1G2G-8B-SFF

PMI's Model No. PS-204-1G2G-8B-SFF is a 1.0 to 2.0 GHz 8-Bit, Digitally Controlled Phase Shifter with the capability for phase shifting from 0° to 204° with resolution as fine as 0.8°. Features include SMA female connectors, 15 Pin Sub-miniature D (Male) with supplied mating connector and TTL Compatible. Unit size is 2.00" x 2.10" x 0.50" with painted blue finish.

- Frequency Range: 1.0 to 2.0 GHz
- RF Input Power: 10 dBm
- Phase Control Range: 204° typical - measured 203.6°
- LSB: 0.8° - measured 0.75°
- Switching Speed: 1 usec, 500 nsec typical - measured <300 nsec
- VSWR: 2.5:1 - measured 1.9:1
- RF Impedance: 50 Ω
- Insertion Loss: 6.0 dB typical - measured 4.9 dB
- Phase Flatness: ±10.0° maximum - measured ±6.7°
- Amplitude Error: ±1.0 dB maximum - measured ±0.3 dB
- Power Supply: +12 V to +15 V @ 50 mA typical - measured 39 mA

Click [here](http://www.pmi-rf.com/products/phaseshift-biphase/ps-204-1g2g-8b-sff.htm) for more details...
2.0 PMI Model No.: SDLVA-18G40G-65-2-292FF

PMI's Model No. SDLVA-18G40G-65-2-292FF is a Successive Detection Log Video Amplifier (SDLVA) that operates between the 18.0 to 40.0 GHz frequency range. It has a dynamic range of 65 dB. This unit has a log slope of 25 mV/dB, and a nominal video bandwidth of 32 MHz. This design uses cutting edge GaAs technology which provides excellent performance and reliability in a compact package making it an optimum solution for high speed channelized receiver applications. The unit has SMA Female connectors in a nickel plated housing measuring 2.37" x 1.80" x 0.42".

- Frequency Range: 18.0 to 40.0 GHz
- TSS: -65 dBm @ 25 °C - measured -68 dBm
- Input Power Handling: 10 dBm maximum
- Video Log Linearity: ±2.0 dB to +2 dBm - measured +1.72 dB, -1.72 dB
  ±3.0 over temperature
- Video Log Range: -63 dBm to +2 dBm
- Video Log Slope: 25 mV/dB nominal - measured 24.2 mV/dB
- Video Log Intercepts: Video Output at 2 dBm: 1940 mV maximum, 1476 mV minimum
  Video Output at -63 dBm: 280 mV maximum, 65 mV minimum
- Video Frequency Flatness: ±2.5 dB max @ 2 5°C - measured ±2.20 dB
- Pulse Width Range: 30 nsec to CW
- Video Rise Time: 11 nsec (8 nsec typical) - measured 10.04 nsec
- Recovery Time: 60 ns (40 nsec typical) - measured 60 nsec
- Delay Time: 15 nsec (5 nsec typical) - measured 14.6 nsec
  7 nsec over temperature typical
- Video Output Impedance: 50 ohm
- Input VSWR (50 OHM): 2.5:1 - measured 2.34:1
- DC Power Supply: +12V @ 600 mA - measured +310 mA
  -12 V @ 250 mA - measured -150 mA

Click [here](http://www.pmi-rf.com/Products/SDLVA/SDLVA-18G40G-65-2-292FF.htm) for more details...


3.0 PMI's New A Series Amplifiers

PMI's A-Series Amplifiers are available Low Noise, Medium Power and Lost Cost designs and operate over the 10 MHz to 40.0 GHz frequency range. These new models feature:

- Form Fit & Function Design
- Low Noise Figure
- Operating Temp: -54 to +85 °C
- Unconditionally Stable over Temperature
- Excellent Group Delay and Phase Linearity
- Field Replaceable SMA Connectors
- Internal DC regulated Voltage
- Internal Reverse Polarity protection

Available options:
4.0 PMI Model No.: PUC-21D5G32D5G-40-29-292F-SFF

PMI’s Model No. PUC-21D5G32D5G-40-29-292F-SFF is an Up-Converter with an amplified RF output path covering 21.5 to 32.5 GHz. The RF output lower sideband is located at 2*LO-IF and the upper sideband is located at 2*LO+IF.

- RF Output:
  - Frequency: 21.5 to 32.5 GHz
  - (LSB = 2*LO - IF, USB = 2*LO + IF)
  - Conversion Gain: 20 dB typical
  - OP1dB: +20 dBm minimum
- IF Input:
  - Frequency: 300 MHz to 5.0 GHz
  - Input Power: -5 to +5 dBm
  - Isolation to RF: 35 dB typical
- LO Input:
  - Frequency: 11.0 to 16.0 GHz
  - Power Level: -5 dBm Nominal
  - Isolation to RF: 10 dB typical
  - 2*LO Isolation to RF: >30 dB typical
  - 3*LO Isolation to RF: >8 dB typical
- Power Supply: +12 V+/-5% @ 1.9 A typical

5.0 P1T-12G18G-65-T-SFF

PMI’s Model No. P1T-12G18G-65-T-SFF is an absorptive, high speed, single pole single throw switch capable of switching within 50 ns maximum. The frequency range is 12.0 to 18.0 GHz. This switch has a minimum of 65 dB isolation.

- Frequency: 12.0 to 18.0 GHz
- Impedance: 50 Ω
- Input Power: +30 dBm maximum (Survival)
  +20 dBm maximum (Operating)
- Input VSWR: 2.0:1 - measured 1.9:1
- Insertion Loss: 2.8 dB maximum - measured 2.6 dB
- Isolation: 65 dB minimum - measured 88 dB
Switching Speed: 50 ns maximum - measured 22 ns
DC Voltage: +5 VDC, 20 mA typical - measured 22 mA
-15 VDC, 40 mA typical - measured 57 mA

Click here for more details...

PMI Website Link,
http://www.pmi-rf.com/Products/Switches/P1T-12G18G-65-T-SFF.htm

6.0 PMI Model No.: P1T-8G12G-70-R-SFF

PMI's Model No. P1T-8G12G-70-R-SFF is a Reflective, High Speed, Single Pole Single Throw Switch capable of switching within 50 ns maximum. The frequency range is 8.0 to 12.0 GHz. This switch has > 70 dB isolation.

- Frequency: 8.0 to 12.0 GHz
- Impedance: 50 Ω
- Input Power: +30 dBm maximum (Survival)
  +20 dBm maximum (Operating)
- Input VSWR: 1.8:1 typical - measured 1.30:1
- Insertion Loss: 1.8 dB typical - measured 1.13 dB
- Isolation: 70 dB minimum - measured 82.44 dB
- Switching Speed: 50 ns maximum - measured 48.6 ns
- DC Voltage: +5 VDC, 20 mA typical - measured 10 mA
  -15 VDC, 20 mA typical - measured 5 mA

Click here for more details...

PMI Website Link,
http://www.pmi-rf.com/products/switches/P1T-8G12G-70-R-SFF.htm

7.0 PMI Model No.: P2T-12G18G-70-R-SFF

PMI's Model No. P2T-12G18G-70-R-SFF is a Reflective, High Speed, Single Pole Two Throw Switch capable of switching within 100 ns maximum. The frequency range is 12.0 to 18.0 GHz. This switch has > 70 dB isolation.

- Frequency: 12.0 to 18.0 GHz
- Impedance: 50 Ω
- Input Power: +30 dBm maximum (Survival)
  +20 dBm maximum (Operating)
- Input VSWR: 2.0:1 maximum - measured 1.9:1
- Insertion Loss: 2.5 dB typical - measured 2.2 dB
- Isolation: 70 dB minimum - measured 72 dB
- Switching Speed: 100 ns maximum - measured 25 ns
- DC Voltage: +5 VDC, 100 mA typical - measured 23 mA
  -15 VDC, 75 mA typical - measured 33 mA

Click here for more details...

PMI Website Link,
http://www.pmi-rf.com/products/switches/P2T-12G18G-70-R-SFF.htm

8.0 PMI Model No.: P2T-50M40G-95-T-515-292MF-OPT27G
PMI’s Model No. P2T-50M40G-95-T-515-292MF-OPT27G is an absorptive, single pole, two throw, pin diode switch that operates over the 50 MHz to 27 GHz frequency range. This model incorporates a TTL compatible driver for easy system integration.

- Frequency: 0.05 to 27.0 GHz  
- Input Power: +20 dBm CW maximum  
- VSWR: 2.5:1 maximum - measured 2.43:1  
- Insertion Loss: 6.0 dB maximum - measured 4.93 dB  
- Isolation: 70 dB minimum -  
- Switching Speed: 100 ns maximum - measured 87 ns  
- DC Voltage: +5 VDC, 120 mA typical - measured 62 mA  
  -15 VDC, 65 mA typical - measured 57 mA

Click here for more details...

PMI Website Link,  

9.0 P20T-4G8G-80-T-515-SFF

PMI’s Model No. P20T-4G8G-80-T-515-SFF is an absorptive, single pole, twenty throw, pin diode switch that operates over the 4.0 to 8.0 GHz, frequency range. This model incorporates a TTL compatible driver for easy system integration.

- Frequency: 4.0 to 8.0 GHz  
- Input Power: 100 mW CW maximum  
- VSWR: 2.5:1 maximum - measured 2.43:1  
- Insertion Loss: 6.0 dB maximum - measured 3.96 dB  
- Isolation: 70 dB minimum - measured 88.3 dB  
- Switching Speed: 100 ns maximum - measured 87 ns  
- DC Voltage: +5 VDC, 120 mA typical - measured 62 mA  
  -15 VDC, 65 mA typical - measured 57 mA

Click here for more details...

PMI Website Link,  
http://www.pmi-rf.com/Products/Switches/P20T-4G8G-80-T-515-SFF.htm

*** PRODUCT UPDATES ***

10.0 PMI Model No.: 6SFB-100M18G-1MP-MAH

PMI's Model No. 6SFB-100M18G-1MP-MAH is a Receive Switched Filter Bank operating over the frequency range of 100MHz to 18.0GHz. This unit incorporates a 2-Way, absorptive switch to select an input along with two 6-Way switches allowing one of the six filter paths to be chosen. This unit provides 6
dB of gain typically with a typical output of P1dB of +15dBm. The filter channels are centered at 3.4, 5.4, 7.4, 9.4 and 11.4GHz with 2GHz bandwidths. The switching speed is better than 100ns and the filters are easily customizable to meet any other requirements. Other gain requirements can be offered and the unit will accept 3.3V or 5V TTL controls. The +3.3V supply is optional. The housing measures 4.925" x 3.68" x 0.35"

- Frequency Range: 100 MHz to 18.0 GHz
- Gain: (J1 - J3) 18 dB typical, (J6 - J3) -10 dB typical - measured 13.7 to 21.6 dB
- Isolation (J1, J6): 100 dB typical - measured 100 dB
- Switching Speed: 100 ns typical - measured 100 ns
- J1 Input Power Level: -80 dBm to -10 dBm
- J6 Input Power Level: -52 dBm to -22 dBm
- J3 Output Power Level: -62 dBm to +8 dBm typical
- Channel 1
  - Center Frequency: 3400 MHz
  - 3dB Bandwidth: 2000 MHz
  - Rejection: -40 dBc 100 MHz to 2.0 GHz typical, -30 dBc minimum
    - -40 dBc 4.8 to 18.0 GHz typical, -30 dBc minimum
- Channel 2
  - Center Frequency: 5400 MHz
  - 3dB Bandwidth: 2000 MHz
  - Rejection: -40 dBc 100 MHz to 4.0 GHz typical, -30 dBc minimum
    - -40 dBc 6.8 to 18.0 GHz typical, -30 dBc minimum
- Channel 3
  - Center Frequency: 7400 MHz
  - 3dB Bandwidth: 2000 MHz
  - Rejection: -40 dBc 100 MHz to 6.0 GHz typical, -30 dBc minimum
    - -40 dBc 8.8 to 18.0 GHz typical, -30 dBc minimum
- Channel 4
  - Center Frequency: 9400 MHz
  - 3dB Bandwidth: 2000 MHz
  - Rejection: -40 dBc 100 MHz to 8.0 GHz typical, -30 dBc minimum
    - -40 dBc 10.8 to 18.0 GHz typical, -30 dBc minimum
- Channel 5
  - Center Frequency: 11400 MHz
  - 3dB Bandwidth: 2000 MHz
  - Rejection: -40 dBc 100 MHz to 10.0 GHz typical, -30 dBc minimum
    - -40 dBc 12.8 to 18.0 GHz typical, -30 dBc minimum
- Power Supplies: +12 V, -12 V, +5 V, +3.3 V

Click here for more details...

PMI Website Link,
http://www.pmi-rf.com/Products/filters/6SFB-10M18G-1MP-MAH.htm

11.0 PMI Model No.: 16SFB10G-16G-CD-SFF
PMI's Model No. 16SFB10G-16G-CD-SFF is a sixteen channel switch filter bank. This model has sixteen filter channels that cover the frequency range of 2.0GHz to 18.0GHz. This model includes an integral TTL driver and offers fast switching speeds of less than 2usec. This model also handles input power levels up to +30dBm.

- Frequency Range: 2.0 to 18.0 GHz
- Filter Channels: 16
- Insertion Loss:
  - Channels 1 through 6: 7.0 dB maximum
  - Channels 7 through 16: 13.5 dB maximum
- Isolation: 60 dB minimum
- VSWR: 2.0:1 maximum
- Switching Speed: 2 usec maximum
- Impedance: 50 Ω
- Amplitude Match: ±1.5dB
- Power Handling: +30 dBm CW maximum
- Power Supply: +5 VDC, 1500 mA
  -15 VDC, 260 mA

Click [here](http://www.pmi-rf.com/Products/filters/16SFB10G-16G-CD-SFF.htm) for more details...

PMI Website Link,
http://www.pmi-rf.com/Products/filters/16SFB10G-16G-CD-SFF.htm

12.0 PMI Model No.: P32T-0R5G18G-60-T-SFF

PMI's Model No. P32T-0R5G18G-60-T-SFF is a High Speed, Single Pole, Thirty-Two Throw, Absorptive Switch that operates over 500 MHz to 18.0 GHz. This State-Of-The-Art Switch offers top-notch performance of 8.5 dB typical insertion loss and an isolation of 78 dB typically. The switch maintains 2.0:1 maximum VSWR over the full operating frequency with a maximum switching speed of 100 nsec. The operating input power rating is +20dBm CW and the switch is controlled via 5-Bit Decoded TTL. The required DC Supply is ±5 VDC and the housing measures 8.0” x 3.5” x 1.0”.

- Frequency Range: 0.5 to 18.0 GHz
- Insertion Loss: 9.5 dB maximum - measured 8.66 dB
- Isolation: 60 dB minimum (0.5 to 2.0 GHz) - measured 77.39 dB
  70 dB minimum (2.0 to 18.0 GHz)
- VSWR (In/Out): 2.0:1 maximum - measured 1.99:1
- Switching Speed:100 ns maximum - measured 85 ns
- Input Power: 20 dBm CW maximum
- Survival Power: 1 Watt CW, 10 Watts Peak, 1 us
- Control: 5-Bit Decoded TTL
- Power Supply: +5 VDC, 1600 mA - measured 1450 mA
  -5 VDC, 20 mA - measured 100 mA
DC to 40GHz Components, Modules, and Sub-Systems

PMI offers just about any RF/Microwave component, module, or sub-system for both industrial and military based requirements. Please click on the product types below to be directed to our web site catalog. Components and modules can be modified to meet your exact requirement.
(Click on links below to be directed to the web listings)
We truly value your interest in our company and our products. We appreciate your feedback. Please feel free to contact us with any requirements or questions that you may have.

Sincerely,

PMI Marketing Department
7311-F Grove Road Frederick, MD 21704 USA
Phone (301) 662-5019 / Fax (301) 662-1731

4921 Robert J. Mathews Parkway, Suite 1, El Dorado Hills, CA 95762 USA
Phone (916) 542-1401 / Fax (916) 265-2597

Email: sales@pmi-rf.com / Web: www.pmi-rf.com