1.0 PMI Model No. BPM-1840-180-292FF, 18.0 to 40.0 GHz Bi-Phase Modulator

PMI Model No. BPM-1840-180-292FF is a 18.0 to 40.0 GHz Bi-Phase Modulator. It has a typical insertion loss of 8 dB and a maximum VSWR of 3.0:1. This model is outfitted with 2.92 mm female connectors in a housing measuring 1.0" x 1.0" x 0.5".

- Frequency Range: 18.0 to 40.0 GHz
- Insertion Loss: 8 dB Typ. - Measured 7.9 dB
- VSWR: 2.0:1 Goal, 3.0:1 Max. - Measured 2.9:1
- Switching Speed: 100 ns Max. - Measured 44 ns
- Phase Variation: ±40° Typ.
- Amplitude Balance: ±4.0 dB Typ. - Measured -3.8 dB
- Phase Shift Control Input:
  - TTL "0" = 0°
  - TTL "1" = 180°
- Power Handling: 20 dBm Operational
- Impedance: 50 Ohms
- Power Supply:
  - +5 VDC @ 75 mA Max. - Measured 40 mA
  - -5 VDC @ 20 mA Max. - Measured 10 mA

PMI Website Link,

2.0 PMI Model No. EQL-26D5G40G-1D5DB-292MF, 26.5 to 40.0 GHz Equalizer
PMI Model No. EQL-26D5G40G-1D5DB-292MF is a 26.5 to 40.0 GHz, Passive Amplitude Equalizer with a negative slope. It has a maximum VSWR of 2.0:1 with a maximum insertion loss @ 26.5 GHz of 1.5 dB. The housing is measured at 1.10" x 0.67" x 0.22".

- Frequency Range: 26.5 to 40 GHz
- Max Input Power: 0.5 Watts CW
- VSWR: 2.0:1 Max. - Measured 1.86:1 In/1.83:1 Out
- Insertion Loss @ 26.5 GHz: 1.5 dB Max. - Measured 1.483 dB
- Slope: 0.41 ± 0.06 dB/GHz - Measured 0.37 dB/GHz
- Amplitude Accuracy: ±0.5 dB (Compared to Best Fit Straight Line) - Measured 0.50 dB

PMI Website Link,
https://www.pmi-rf.com/product-details/eql-26d5g40g-1d5db-292mf

3.0 PMI Model No. 3BP-4828-170-CD-SFF, 4828.57 MHz Band Pass Filter

PMI Model No. 3BP-4828-170-CD-SFF is a highly temperature stable, narrow band (170 MHz wide), Lumped Element Band Pass Filter centered at 4828.57 MHz with better than 6 dB insertion loss. The housing is measured at 0.53" x 0.70" x 0.26".

- Channel Center Frequency: 4828.57 MHz
- Channel Center Insertion Loss: 6 dB Max. - Measured <6 dB
- Passband Bandwidth: 170 MHz Min. - Measured >170 MHz
- Passband Input/Output VSWR: 2:1 Max. - Measured <2:1
- Rejections:
  - @ Channel 1 (2600.00 MHz): 60 dB Min. - Measured >60 dB
  - @ Channel 2 (2971.43 MHz): 55 dB Min. - Measured >55 dB
  - @ Channel 3 (3342.86 MHz): 50 dB Min. - Measured >50 dB
  - @ Channel 4 (3714.29 MHz): 45 dB Min. - Measured >45 dB
  - @ Channel 5 (4085.71 MHz): 35 dB Min. - Measured >35 dB
  - @ Channel 6 (4457.14 MHz): 28 dB Min. - Measured >28 dB
  - @ Channel 8 (5200.00 MHz): 28 dB Min. - Measured >28 dB

PMI Website Link,

4.0 PMI Model No. P3T-2G8G-70-T-SFF-2, 2.0 to 8.0 GHz, SP3T Absorptive
Switch

PMT Model No. P3T-2G8G-70-T-SFF-2 is a Single Pole, Three Throw, Absorptive Switch that operates over the Frequency Range of 2.0 to 8.0 GHz. It has an insertion loss of 2.1 dB maximum and an isolation of 70 dB minimum. This model is outfitted with SMA female connectors. Its housing measures 1.0" x 1.0" x 0.40".

- Frequency Range: 2.0 to 8.0 GHz
- Insertion Loss: 2.1 dB Max - Measured 2.06 dB
- Isolation: 70 dB Min. - Measured 78 dB
- VSWR: 1.7:1 Max. - Measured 1.70:1 In/1.69:1 Out
- On/Off Time: 180 ns Max. - Measured 30 ns On/21.9 Off
- Power Supply:
  - +5 V @ 85 mA Max. - Measured 81 mA
  - -12 V @ 85 mA Max. - Measured 48 mA
- Input Power: +20 dBm Max.
- Logic:
  - "1" RF On
  - "0" RF Off

PMT Website Link,
https://www.pmi-rf.com/product-details/p3t-2g8g-70-t-sff-2

5.0 PMI Model No. LM-400M2G-20-1W-SFF, 400 MHz to 2.0 GHz Coaxial Limiter

PMT Model No. LM-400M2G-20-1W-SFF is a Coaxial Limiter that operates over the 400 MHz to 2.0 GHz frequency range. This model offers a maximum of 0.7 dB insertion loss while handling 1 W CW maximum. It features a maximum VSWR of 2.0:1. The compact 0.65" x 0.532" x 0.22" housing is outfitted with SMA female connections.

- Frequency Range: 0.4 to 2.0 GHz
- Insertion Loss: 0.7 dB Max. - Measured 0.69 dB
- Leakage Power: 100 mW Max. - Measured 30.9 mW
- Spike Leakage: 0.1 erg. Max. - Measured 0.004 erg
- Recovery Time: 250 ns Max. - Measured <20 ns
- VSWR: 2.0:1 Max. - Measured 1.59:1
- RF Power Handling:
  - 1 W CW Max.
  - 3 W Peak Max. (1µs Pulse Width, 0.1% duty cycle)

PMT Website Link,
https://www.pmi-rf.com/product-details/lm-400m2g-20-1w-sff

6.0 PMI Model No. P7T-0R8G18G-60-T-SFF-SMC, 0.8 to 18.0 GHz, Absorptive Switch


PMI Model No. P7T-0R8G18G-60-T-SFF-SMC is a Single Pole, Seven Throw, Absorptive Switch with SMA female connectors and SMC control connectors. It has a frequency range of 0.8 to 18 GHz, 4.3 dB maximum insertion loss, and 60 dB isolation minimum @ 18.0 GHz. It has an input power of +20 dBm CW (Standard). The housing is measured at 0.7” x ø1.5”.

- Frequency Range: 0.8 to 18.0 GHz
- Insertion Loss: 4.3 dB Max. - Measured 4.30 dB
- Isolation: 0.8 to 18.0 GHz: 60 dB Min. - Measured 67.40 dB
- VSWR:
  - In/Out: 2.0:1 - Measured 2.0:1
  - Out/Off: 2.0:1 - Measured 1.99:1
- Speed:
  - Rise: 15 ns Max. - Measured 6.60 ns
  - Fall: 15 ns Max. - Measured 9.10 ns
  - Delay on: 75 ns Max. - Measured 17.20 ns
  - Delay off: 75 ns Max. - Measured 50.40 ns
- Input Power: +20 dBm CW (Standard)
- Survival Power: 1 Watt CW, 10 Watts Peak 1 us
- Control: TTL Logic "0" = On, "1" = Off
- Power Supply:
  - +5 V @ 350 mA Max. - Measured 300 mA
  - -5 V @ 100 mA Max. - Measured 45 mA

PMI Website Link,
https://www.pmi-rf.com/product-details/p7t-0r8g18g-60-t-sff-smc

7.0 PMI Model No. LM-2G18G-18-20W-1KWP-SFF, 2.0 to 18.0 GHz High Power Limiter

PMI Model No. LM-2G18G-18-20W-1KWP-SFF is a High Power Limiter that operates over the 2.0 to 18.0 GHz frequency range. The maximum insertion loss @ -10 dBm input power is 2.6 dBm. This model is capable of handling an input power of 20 Watts CW and 1000 Watts Peak, housed within a compact 1.00" x 1.00" x 0.40" package and outfitted with field replaceable SMA female connectors.

- Frequency Range: 2.0 to 18.0 GHz
- RF Input Power: +43 dBm CW Max.
- Peak Input Power: +50 dBm 10% DC, 40 us PW Max.
- Limiting Threshold (P1dB): +5.0 dBm Min. - Measured +6 dBm Min., +10 dBm Max.
- RF Leakage (Flat and Spike): +18 dBm Max. - Measured +13.70 dBm
- Recovery Time: 100 ns Max. - Measured 7.33 ns
- Insertion Loss @ -10 dBm Input Power: 2.6 dB Max. - Measured 1.88 dB
- VSWR @ -10 dBm Input Power: 2.0:1 Max. (Input/Output) - Measured 1.64:1 In/1.73:1 Out
- Insertion Phase: Measured at an Input Power Level of 0 dBm will be within ±2.0 degrees relative to the phase measured at Input Power Levels less than or equal to 0 dBm

PMI Website Link,
https://www.pmi-rf.com/product-details/lm-2g18g-18-20w-1kwp-sff
8.0 PMI Model No. 6SFB-1G20G-LP-AMP-SFF, 1.0 to 20.0 GHz, 6-Channel Switch Filter Bank

PMI Model No. 6SFB-1G20G-LP-AMP-SFF is a Six Channel, Switch Filter Bank (SFB) followed by an Amplifier that operates over the 1.0 to 20.0 GHz frequency range. It has a maximum power handling of +15 dBm. This model offers fast switching speeds of 200 ns while maintaining a gain of 20 dB and 10 dBm P1dB in a housing measuring 5.50" x 3.00" x 0.75".

- Frequency Range: 1.0 to 20.0 GHz
- VSWR: 2.0:1 Max.
- Output 2nd Harmonic: 45 dBc @ 0 dBm Output Power (Filter passband must be selected for maximum harmonic attenuation. Thru path 2nd harmonic value -15 dBc Typ.) - Measured CH1 - 64.33 dBc, CH2 - 65.17 dBc, CH3 - 65.0 dBc, CH4 - 62.17 dBc, CH5 - 58.93 dBc, Thru Path - 15.84 dBc
- Switching Speed: 200 ns Typ. (From 50% TTL to 90%/10% RF) - Measured 74 ns
- Power Handling: +15 dBm Max.
- Output P1dB: +10 dBm Min. - Measured 16.31 dBm
- Logic Input:
  - TTL Compatible, 3 Bits Decoded
  - TTL High = 2 V Min.
  - TTL Low = 0.8 V Max.
- Power Supply
  - +15 VDC @ 800 mA Max. - Measured + 15 VDC @ 580 mA Maximum
  - -15 VDC @ 100 mA Max. - Measured - 15 VDC @ 60 mA Maximum

PMI Website Link,
https://www.pmi-rf.com/product-details/6sfb-1g20g-lp-amp-sff

9.0 PMI Model No. PLO-840M-150-15DBM-12V-SF, 840 MHz Phase-Locked Oscillator

PMI Model No. PLO-840M-150-15DBM-12V-SF is a Phase-Locked Oscillator with a frequency of 840 MHz. The minimum output power is +20 dBm, maximum harmonics are -25 dBc, and maximum spurs of -80 dBc. This model is offered in a slim line housing measuring 2.25" x 2.25" x 0.6".

- Frequency Range: 840 MHz
- Stability: Same as Reference
- Reference: 10 MHz, Power = 3 dBm ± 3 dB
- Ref. Input Impedance: 50 Ohms
- Ref. Phase Noise:
  - -140 dBc/Hz @ 1 kHz Max.
  - -150 dBc/Hz @ 10 kHz Max.
- Output Power: +20 dBm Min. - Measured 21.8 dBm
- Harmonics: -25 dBc Max. - Measured -55 dBc
- Sub-Harmonics: -60 dBc Max. - Measured -65 dBc
- Spurs: -80 dBc Max. - Measured -86 dBc
- Phase Noise:
  - -120 dBc/Hz Max. @ 10 kHz Typ., -115 dBc/Hz Max.
10.0 PMI Model No. LM-30M3G-C3-1-PE2-HERM, 30 MHz to 3.0 GHz High Power Limiter

PMI Model No. LM-30M3G-C3-1-PE2-HERM is a High Power Limiter, supplied in our standard PE2 Housing, that works from 30 MHz to 3.0 GHz and has a maximum insertion loss of 1.2 dB. It has a maximum VSWR of 1.5:1 and it handles 5 watts CW with a typical leakage power of +10 dBm. It is supplied in a hermetically sealed housing measuring 1.08" x 0.71" x 0.29".

- Frequency Range: 30 MHz to 3.0 GHz
- Insertion Loss: 1.2 dB Max. - Measured 0.36 dB
- Peak Power: 5 Watts CW @ +25°C
- Leakage Power: +10 dBm Typ. - Measured 12.62 dBm
- Recovery Time: 1 us Max. - Measured 9.87 ns
- VSWR: 1.5:1 Max. - Measured 1.16:1 In/1.11:1 Out
- DC Blocking: Input and Output
- Sealing: Hermetic

11.0 PMI Model No. PDRO-7519R95M-13DBM-SFF, 7519.95 MHz PDRO

PMI Model No. PDRO-7519R95M-13DBM-SFF is a PDRO with an output frequency of 7519.95 MHz and a minimum output level of +13 dBm. It has a maximum frequency accuracy at 25°C of +1 ppm and a maximum frequency stability of +2 ppm over operating temp. This model is outfitted with SMA female connectors in a housing measuring 2.25" x 2.25" x 0.62".

- Output Frequency: 7519.95 MHz
- Reference Frequency: Internal
- Warm Up Time: 5 minutes Max.
- Frequency Accuracy at 25°C: +1 ppm Max.
- Frequency Stability: +2 ppm Max. Over Operating Temp
- Output Level: +13 dBm Min. - Measured 13.02 dBm
- Spurious: -80 dBc Max. - Measured -82.55 dBc
- Harmonics: -20 dBc Max. - Measured -40.22 dBc
- Load VSWR: 1.5:1
- Phase noise @ 25°C:
  - -77 dBc/Hz @ 100 Hz Max.
  - -107 dBc/Hz @ 1 kHz Max.
  - -120 dBc/Hz @ 10 kHz Max.
  - -123 dBc/Hz @ 100 kHz Max.
  - -137 dBc/Hz @ 1 MHz Max.
  - -150 dBc/Hz @ 15 MHz Max.
- Mech Tuning: None
Supply Voltage: +15 V ± 10%
Current: 450 mA Max. Steady, 850 mA Max. Surge - Measured 260 mA
Lock Detector: TTL High - Lock
Lock Detector Voltage Range: 0 V - 5 V - Measured 4.99 V
Lock Voltage Range: 0V - 10V - Measured 5.84 V

**PMI Website Link**,  
https://www.pmi-rf.com/product-details/pdro-7519r95m-13dbm-sff

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