TAKING COMMAND THROUGH THE
Development of Innovative Electronic Warfare and Radar Technologies
Microwave Products Group specializes in RF Filters, Switches and Integrated Microwave Assemblies (IMAs) from prototypes, up to high volume applications for the Electronic Warfare market.

**Core Product Expertise**
- Product Customization
- Preferred Supplier
- In-house Manufacturing

**Added Value Solutions**
- Integrated Microwave Assemblies (IMAs)
- Multi-Function Assemblies
- Modular Open System Architecture (MOSA)

**Highly Experienced Team**
- Develops Next Generation Market Solutions while maintaining affordability and reliability
- Continues enhancing processes to improve quality, reliability and cost

**Certifications**
- Dominican Republic: ISO 9001:2008
- West Chester: AS9100
- Salisbury: AS9100
- AS9100
- ISO 14001:2015
- Ventura: AS9100

**Innovation in Design**
The quest for ever higher levels of performance and cost competitiveness drives our design and development initiatives.

MPG’s next generation array of products, legacy design expertise and production facilities are a must for ever-changing threats.

**Connect & Protect**
Present and Future Dynamic Threats

**Ideal For:**
- RADAR & Electronic Warfare (EW) systems
- Command & Control vehicles (Ground, Naval, Airborne)
- Software Defined Radios (SDR)
- Vehicle Amplifier Adapters (VAA)

**Surface Mount**
- Lumped Element
- Waveguide

**Surface Mount**
- Pin Diode
- Coaxial
- Waveguide

**Integrated Microwave Assemblies (IMAs)**
- Signal Distribution Unit
- 18 GHz IMA
- Down Converter w/ LNA
- Test Systems

**EW Applications**
Filters

**Agile and Tunable**

- **Thin Film**
  - Q250-400
  - 1 MHz BP BS 28 GHz
  - BW = 2%
  - Multi-Octave

- **Helical**
  - Q800-1,200
  - 30 MHz BP BS 1.3 GHz
  - BW = 0.5 - 15%

- **Lumped Element**
  - Q50-300
  - 300 KHz BP BS 6 GHz
  - BW = 1%
  - Multi-Octave

- **Mini-Max**
  - Q20-1000
  - 20 MHz BP BS 3 GHz
  - BW = 2 - 20%

- **Ceramic**
  - Q150-1,000
  - 500 MHz BP BS 3 GHz
  - BW = 1 - 30%

- **Tubular**
  - Q300-700
  - 20 MHz BP BS 20 GHz
  - BW = 1 - 50%

- **Combline**
  - Q500-4,000
  - 400 MHz BP BS 20 GHz
  - BW = 0.2 - 100%

- **Cavity**
  - Q500-30,000
  - 100 MHz BP BS 30 GHz
  - BW = 10%
  - Multi-Octave

- **Suspected Substrate**
  - Q400-600
  - 500 MHz BP BS 50 GHz
  - BW = 0.2 - 5%

- **Suspected Substrate Puck**
  - Q500-4,000
  - 4 GHz BP BS 27 GHz
  - BW = 0.5 - 10%

- **Waveguide**
  - Q1,000-20,000
  - 1 GHz BP BS 100 GHz
  - BW = 1%
  - Multi-Octave

- **Lumped Element Ceramic Cavity**
  - 300 KHz BP BS 100 GHz
  - BW = 1%
  - Multi-Octave

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Switches

**Solid State Pin Diode**

- 100 MHz - 18 GHz, SPDT - SP8T
- Switching Speed: 100 & 250 nsec max.
- High Power Options Available
- Space Qualified Options Available

**Miniature Mechanical (In process R&D)**

- DC - 8 GHz
- SPDT, DPDT
- Latching Actuator
- Space Qualified Options Available

**Coaxial**

- DC - 26.5 GHz, DC - 40 GHz
- SPDT, DPDT, SP3T-SP14T3
- Actuator: FailSafe, Normally Open, Latching Self-Cutoff
- Options: Internal or External Terminations
- Space Qualified Options Available

**Reliant**

- DC - 26.5 GHz
- SPDT, SP6T with terminations
- Latch Self-Cutoff Actuator
- Space Qualified Options Available

**Waveguide**

- WR62, WR75, WR90, WR112*
- SPDT & DPDT
- Latching Actuator
- Other Options Available
- Space Qualified Options Available

Switches are normally controlled via DC power, TTL, or CANBus messaging; Other control may be available upon request.

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Enabling Communication and Signal Control

Count on us for mission critical support
Integrated Microwave Assemblies (IMAs)

Maximizing integration is key to offering the best possible performance in a small form factor. We offer innovative low risk solutions, by utilizing our expertise in integrated small multifunction, modular sub-systems.

As filter & switch experts, MPG has built on a historic reputation of quality and performance by adding active capability around our passive RF devices. Multiple functions can be carried out by a single self-contained block incorporating amplification/gain control, temperature compensation and offsets. We provide digital functionality using FPGA control & calibration.

Reliable. Faster. Modular.
Next Generation Integration Microwave Assemblies

- Highly scalable and modular
- Trouble-free maintenance for field upgrades & repair
- 1RU/2RU/3RU/4RU rack mountable enclosures
- LCD/Keypad or Touch Screen manual control
- Remote controls: Ethernet (TCP/IP) with HTTP server or SNMP v1/v2 or GPIB & RS-232 and USB

Systems are fully controlled through controller module(s) with Windows based PC and removable hard drive.

Cosite Communication Interference Solutions

Ideal for SIGINT & COMINT applications, aboard ships and ISR aircraft, DF (direction finding) systems and other sensitive RF systems.

MPG is the premier provider of solutions for communications challenges arising from RF interference. Our products enable military platforms to simultaneously operate multiple radios on the same platform without degradation in performance, range or compromises in con-ops. Our integrated Cosite Equipment (ICE) line of products are incorporated between radios and antennas to enable simultaneous operation of all your communications, radar, SIGINT/COMINT and other RF systems.

Today’s electromagnetic (EM) environment has provoked new technologies:
- Multi-role devices and platforms
- Smaller, lighter, cost effective solutions

Cosite Analysis & System Integration

QFN - Extremely High Q

- L-Band (1 - 2 GHz)
- S-Band (2.4 - 3.5 GHz)
- X-Band (7 - 12 GHz)
- X-Band Notch (7 - 12 GHz)
Microwave Products Group unifies the heritage, product leadership and innovation of four world-class brands to enable communication, provide signal control and take command of electronic warfare and radar technology development.

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