



Corning[®] Microwave Push-On Interconnects

Why Corning Microwave Connectivity Solutions

With more than 60 years of leading-edge design experience, Corning exceeds industry standards with high performance coaxial connectors that provide system designers with extraordinary size, weight, and power (SWaP) for today's high frequency package configurations.

Key Features

- High-Frequency and high-density solutions
- Center-to-center spacing in as little as 0.07-in
- Weight as low as 0.005 g
- Accommodates both radial and axial misalignment with negligible change in voltage standing wave ratio (VSWR)
- More than 10,000+ cable connectors, edge and flange mounts, interconnects and PCB mounts available.

Applications

- Telecommunications, test, and measurement
- Aerospace and defense industries
- Shipboard, airborne, ground-based, cryogenic, and non-magnetic

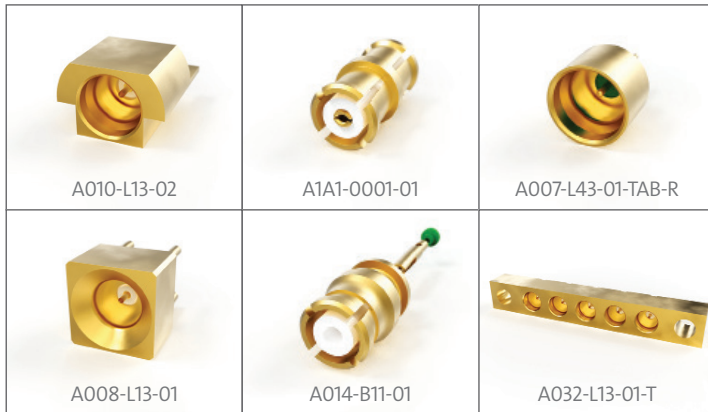
Custom Designs

- Our tailored design solutions include multiposition blocks, hermetic shrouds, cable connectors, PCB mounts, blind mate interconnects, loads, and adapters.
- Electrical, Mechanical, and Environmental tests available to be performed in-house. Our connectors and adapters meet MIL-PRF-39012 or MIL-PRF-31031 standards.
- Complete with high-precision Swiss turning centers, CNC mills, and a plating shop in-house, our dedicated machine shop is equipped to produce the custom designs you need.

Our GPO® interconnect series offers a blind mate interconnect that has a center-to-center spacing of 0.17 in and weighs .17 g. Within this series, we also offer adapters available to SMA, 2.4 mm, and 2.92 mm.

GPO® Environmental Performance*

Thermal Shock	MIL-STD-202, Method 107, Condition B
Vibration	MIL-STD-202, Method 204
Moisture Resistance	MIL-STD-202, Method 106, Except Step 7B
Salt Spray	MIL-STD-202, Method 101
Shock	MIL-STD-202, Method 213, Condition I



GPO® Product Characteristics*

Impedance	50 Ohms
Frequency	DC to 26.5 GHz, performance available to 40 GHz
Temperature Range	-65°C to +165°C
Center Conductor Contact Resistance	6.0 milliohms max., inner conductor 2.0 milliohms max., outer conductor
Insulation Resistance	5,000 megaohms min.
VSWR	1.15:1 to 26.5 GHz typ.; < 1.50:1 to 40 GHz typ.
DWV at Sea Level	500 Vrms
Corona Level at 70,000 ft	190 Vrms
RF High Pot. at 5 MHz	325 Vrms
Center Contact Retention	1.5 lbs min. (captivated designs)
Radial Misalignment	3 degrees
Axial Misalignment	0.029 in
Force to Disengage †	9.0 lbs typ. full detent, 7.0 lbs limited detent, 0.5 lbs typ. smooth bore
Force to Engage †	7.0 lbs typ. full detent, 5.0 lbs typ. limited detent, 3.0 lbs typ. smooth bore

* Performance listed is typical. Individual part configuration may vary. Contact our technical team for more information and specification by part number.

† Engage/disengage forces are not typical when mated with ASTM-F15 shrouds.

**Learn More About GPO® at
Corning.com/Microwave or
Contact Our Customer Care Team:**



Phone:

1-800-743-2675 (U.S. and Canada)
1-828-901-5000 (International)



For inquiries/quote requests:

ccsamericas@corning.com

Our GPPO® interconnect series offers a blind mate interconnect that has a center-to-center spacing of 0.135 in and weighs .09 g. Within this series, we also offer adapters available to SMA, 2.4 mm, and 1.85 mm.

GPPO® Environmental Performance*

Thermal Shock	MIL-STD-202, Method 107, Condition B
Vibration	MIL-STD-202, Method 204
Moisture Resistance	MIL-STD-202, Method 106, Except Step 7B
Salt Spray	MIL-STD-202, Method 101
Shock	MIL-STD-202, Method 213, Condition I



GPPO® Product Characteristics*

Impedance	50 Ohms
Frequency	DC to 40 GHz
Temperature Range	-65°C to +165°C
Center Conductor	6.0 milliohms max., inner conductor
Contact Resistance	2.0 milliohms max., outer conductor
Insulation Resistance	5,000 megaohms min.
VSWR	1.15:1 to 15 GHz, 1.25:1 to 26.5 GHz, and 1.30:1 to 40 GHz
DWV at Sea Level	325 Vrms
Corona Level at 70,000 ft	125 Vrms
RF High Pot. at 5 MHz	200 Vrms
Center Contact Retention	1.5 lbs min. (captivated designs)
Radial Misalignment	3 degrees
Axial Misalignment	0.020 in
Force to Disengage †	6.5 lbs typ. full detent, 1.5 lbs typ. smooth bore
Force to Engage †	4.5 lbs typ. full detent, 2.5 lbs typ. smooth bore

* Performance listed is typical. Individual part configuration may vary. Contact our technical team for more information and specification by part number.

† Engage/disengage forces are not typical when mated with ASTM-F15 shrouds.

**Learn More About GPPO® at
Corning.com/Microwave or
Contact Our Customer Care Team:**



Phone:

1-800-743-2675 (U.S. and Canada)
1-828-901-5000 (International)



For inquiries/quote requests:

ccsamericas@corning.com

Our G3PO™ interconnect series offers a blind mate interconnect that has a center-to-center spacing of 0.085 in and weighs 0.016 g. Within this series, we also offer adapters available to SMA, 2.4 mm, and 1.85

G3PO™ Environmental Performance*

Thermal Shock	MIL-STD-202, Method 107, Condition B
Vibration	MIL-STD-202, Method 204
Moisture Resistance	MIL-STD-202, Method 106, Except Step 7B
Salt Spray	MIL-STD-202, Method 101
Shock	MIL-STD-202, Method 213, Condition I



G3PO™ Product Characteristics*

Impedance	50 Ohms
Frequency	DC to 65 GHz
Temperature Range	-65°C to +165°C
Center Conductor	6.0 milliohms max., inner conductor
Contact Resistance	2.0 milliohms max., outer conductor
Insulation Resistance	3,500 megaohms min.
VSWR	1.15:1 to 15 GHz, 1.25:1 to 26.5GHz and 1.30:1 to 65 GHz
DWV at Sea Level	250 Vrms
Corona Level at 70,000 ft	100 Vrms
RF High Pot. at 5 MHz	150 Vrms
Center Contact Retention	0.75 lbs min. (captivated designs)
Radial Misalignment	5 degrees
Axial Misalignment	0.010-in (flush to -0.010-in from the reference plane)
Force to Disengage †	4.5 lbs typ. full detent, 1.0 lbs typ. smooth bore
Force to Engage †	2.5 lbs typ. full detent, 1.2 lbs typ. smooth bore

* Performance listed is typical. Individual part configuration may vary. Contact our technical team for more information and specification by part number.

† Engage/disengage forces are not typical when mated with ASTM-F15 shrouds.

**Learn More About G3PO™ at
Corning.com/Microwave or
Contact Our Customer Care Team:**



Phone:

1-800-743-2675 (U.S. and Canada)
1-828-901-5000 (International)



For inquiries/quote requests:

ccsamericas@corning.com

Our G4PO™ interconnect series offers a blind mate interconnect that has a center-to-center spacing of 0.070 in and weighs .005 g. Within this series, we also offer adapters available to 2.92 mm and 1.85 mm.

G4PO™ Environmental Performance*

Thermal Shock	MIL-STD-202, Method 107, Condition B
Vibration	MIL-STD-202, Method 204
Moisture Resistance	MIL-STD-202, Method 106, Except Step 7B
Salt Spray	MIL-STD-202, Method 101
Shock	MIL-STD-202, Method 213, Condition I



G4PO™ Product Characteristics*

Impedance	50 Ohms
Frequency	DC to 60 GHz
Temperature Range	-65°C to +165°C
Center Conductor	6.0 milliohms max., inner conductor
Contact Resistance	2.0 milliohms max., outer conductor
Insulation Resistance	3,500 megaohms min.
VSWR	1.15:1 to 15 GHz typ.; 1.25:1 to 60 GHz typ.
DWV at Sea Level	250 Vrms
Corona Level at 70,000 ft	100 Vrms
RF High Pot. at 5 MHz	150 Vrms
Center Contact Retention	0.75 lbs min. (captivated designs)
Radial Misalignment	5 degrees
Axial Misalignment	0.007-in (flush to -0.007-in from the reference plane)
Force to Disengage †	2.2 lbs typ. full detent, 0.15 lbs typ. smooth bore
Force to Engage †	.65 lbs typ. full detent, 0.20 lbs typ. smooth bore

* Performance listed is typical. Individual part configuration may vary. Contact our technical team for more information and specification by part number.

† Engage/disengage forces are not typical when mated with ASTM-F15 shrouds.

**Learn More About G4PO™ at
Corning.com/Microwave or
Contact Our Customer Care Team:**



Phone:

1-800-743-2675 (U.S. and Canada)
1-828-901-5000 (International)



For inquiries/quote requests:

ccsamericas@corning.com