

CORNING

# Gilbert<sup>®</sup> Microwave Connectors

## GPPO<sup>®</sup> Interconnect Series

When precision and performance are critical elements in your network, our microwave solutions are able to meet those requirements with field-tested and customized product sets. Initially developed for the demanding requirements of military applications, our microwave products include high-precision, high-performance mini connectors. Providing best-in-class performance and reliability, these products are now used in telecommunications, test and measurement, wireless, and satellite networks.

Our GPPO<sup>®</sup> interconnect series offers a blind mate interconnect that has a center-to-center spacing of 0.135 in and weighs just .09 g. This series is designed to accommodate both radial and axial misalignment with negligible voltage standing wave ratio (VSWR) change to ensure high performance in high-stress environments. Within this series, we also offer adapters available to SMA, 2.4 mm, and 1.85 mm.

### 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

\*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.

### Product Characteristics\*

Impedance	50 Ohms
Frequency	DC to 65 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	1.10:1 to 26.5 GHz typ.; 1.30:1 to 50 GHz typ.
DWV @ Sea Level	325 Vrms
Corona Level @ 70,000 ft	125 Vrms
RF High Pot. @ 5 MHz	200 Vrms
Center Contact Retention	1.5 lbs min. (captivated designs)
Radial Misalignment	+/-0.010 in
Axial Misalignment	0.010-in (flush to -0.010-in from the reference plane)
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

