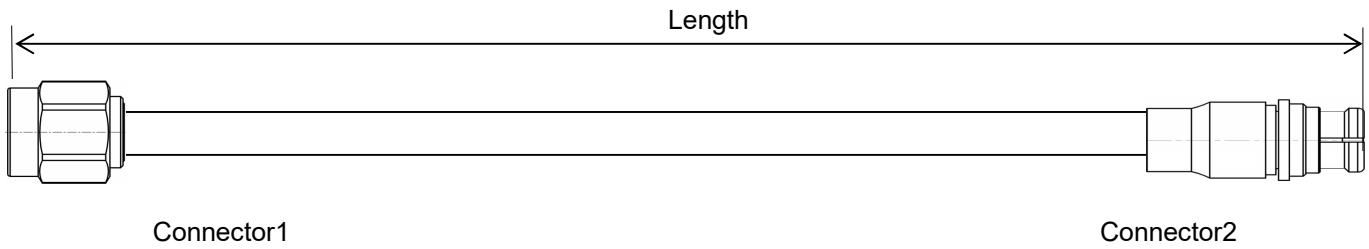


## 086" High Density Phase Stable Flexible Cable Assembly, Using PL220

DC-40 GHz, Direct Solder 2.92mm Male to SMP Female

PL220-D292MSMPF-L(L:Length)

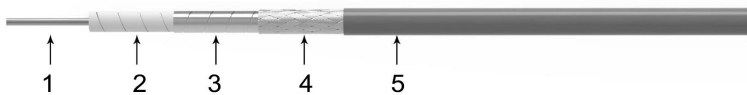


- Length can be in meter or in inch etc, e.g, PL220-SMPFSMPFRA-L. Standard length tolerance:  $\pm 1.5\%$  or  $\pm 5\text{mm}$  whichever is greater. Custom lengths and other connector types available.
- Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

### Configuration

<b>Connector 1</b>	Direct solder 2.92mm male	<b>Connector 2</b>	SMP female
Body	Gold plated brass	Body	Gold plated BeCu
Nut	Passivated stainless steel	Center Contact	Gold plated BeCu
Center Contact	Gold plated BeCu	<b>Cable Type</b>	PL220

### Cable Construction



No.	Construction	Size (mm)	Materials
1	Center Conductor	0.51	Solid silver-plated copper
2	Dielectric	1.43	Ultra-low density PTFE
3	Outer Conductor	1.55	Silver-plated copper tape wrap
4	Outer Shield	1.85	Silver-plated copper wire braid
5	Jacket	2.20	FEP



### Electrical

Frequency	DC-40 GHz
Impedance	50 $\Omega$
VSWR Max	1.45
*IL Max(0.1 meter assembly)	1.06dB
**Mechanical Phase Stability	$< \pm 5^\circ$
Amplitude Stability vs Shaking	$< \pm 0.15\text{dB}$

### Mechanical & Environmental

Min.Bending Radius Static	11mm
Min. Bending Radius Repeated	22mm
Velocity of Propagation	81%
Temperature(Operation)	-50 ~ 105 $^\circ\text{C}$
Temperature(Storage)	-60 ~ 105 $^\circ\text{C}$

\* The VSWR and IL include the loss and reflection contributions from the SMP adapters used during testing.

\*\* Wrapped 360° around a 22mm radius mandrel.



## 086" High Density Phase Stable Flexible Cable Assembly, Using PL220

DC-40 GHz, Direct Solder 2.92mm Male to SMP Female

PL220-D292MSMPF-L(L:Length)

### Bulk Cable Attenuation(Typical@25°C) & Power(VSWR=1.0; 40°C; Sea level)

Frequency MHz	300	1000	2000	3000	6000	12000	18000	26500	30000	40000	50000	67000
dB/100 Meter	34.3	63.3	90.3	111.3	159.8	230.7	286.9	354.3	379.4	445.2	504.8	596.4
Avg.Power kW	0.510	0.277	0.194	0.157	0.110	0.076	0.061	0.049	0.046	0.039	0.035	0.029

Attenuation at any frequency= $[1.96000 \times \text{SQRT}(\text{FMHz})] + [0.001330 \times \text{FMHz}]$

#### Notes:

- 1) The above attenuation refers to typical loss of cable only, max loss is 1.1 times of typical loss. Insertion loss per connector is estimated as  $0.03\text{dB} \times \text{SQRT Freq}(\text{GHz})$ .
- 2) Power handling values are calculated based on cable properties. Power handling will vary based on connector type and actual VSWR of the cable assembly.