

## Full Waveguide Bandwidth Dual Circular Polarized Prime Focus Antenna Feeds

This data sheet summarizes the family of directly interchangeable full waveguide bandwidth dual circular polarized low axial ratio prime focus parabolic reflector feeds. This particular feed family was designed for reflectors with  $f/d$  ratios of 0.35-0.42. The scalar feeds do not contain lossy dielectrics. They are constructed of all metal waveguide components for maximum radiation efficiency. The scalar feeds operate over a full waveguide bandwidth. The model numbers listed below are indicative of feeds having coaxial inputs. However, the scalar style feeds can be purchased with their respective standard waveguide input. All feeds share identical mounting and focal point placement offering a truly interchangeable feed family system. This feature makes them excellent candidates for outfitting antenna test ranges, portable multi-band applications and for use in many other applications. All feeds have a Type 1 gold chromate metal finish and are sealed for outdoor use. Specifications are listed in the table below.

Model	Frequency	Polarization	On-Axis Axial Ratio	RF Input
FPP2DC-13-S **	0.95-1.60 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP2DC-19-S	1.40-2.40 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP2DC-20-S	1.50-2.50 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP2DC-33-S	2.60-3.95 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP1DC-22-S **	1.70-2.60 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP1DC-33-S	2.60-3.95 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP1DC-49-S	3.95-5.85 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP1DC-70-S	5.85-8.20 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP1DC-103A-S	8.00-12.0 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP1DC-152A-S	12.0-18.0 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP1DC-187-S	17.7-19.7 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP1DC-222-S	18.0-26.5 GHz	Dual Circular	1.5 dB max*	(2) SMA female
FPP1DC-333-K	26.5-40.0 GHz	Dual Circular	1.5 dB max*	(2) K female
FPP1DC-415-2.4	33.0-50.0 GHz	Dual Circular	1.5 dB max*	(2) 2.4mm female

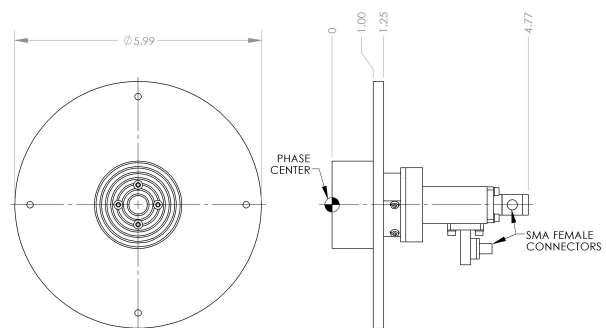
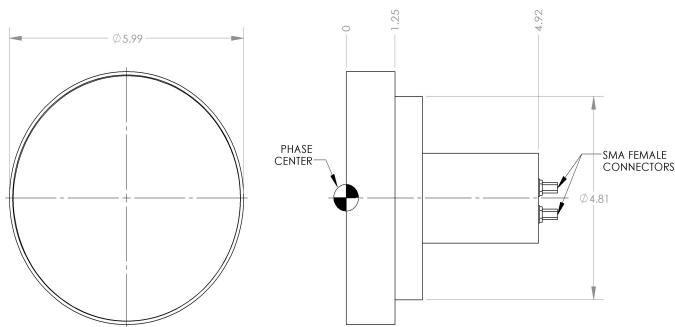
\* Typical On-Axis Axial Ratio Performance is  $\leq 1.2$  dB

\*\* Non-standard mounting configuration.

Standard mounting details consist of a 6" diameter mounting surface with (4) #10-32 tapped holes on a 5.25" D.B.C.

Dimensions for FPP2DC-19-S & FPP2DC-20-S shown below

Dimensions for Scalar Feed FPP1DC-222-S shown below



- NOTES: 1) Scalar feed models can be optimized for alternate  $f/d$  ratio reflectors.  
 2) An additional mounting plate can be added to suit customer specific mounting requirements.  
 3) Alternate coaxial input styles are available upon request.  
 4) Scalar feeds with waveguide inputs are capable of handling high transmit power.

Specifications are subject to change without notice.  
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