



Features

- **Linear to circular conversion**
- **Customisable to applications**
- **Models from 2.60GHz – 330GHz**

Applications

- **Suitable for conversion between linear and circular polarisation for transmission and reception via a horn antenna**

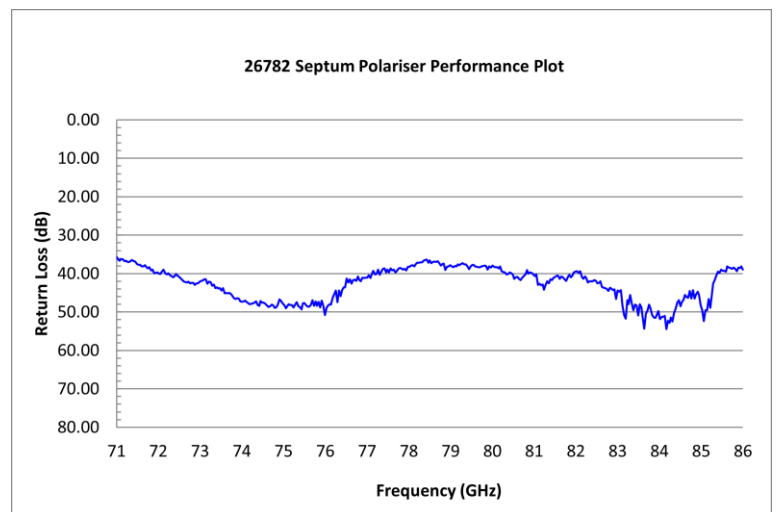


Model 26782 - Special

The Septum Polariser uses an internal stepped septum to convert between linear and circular polarisation. The instrument has two rectangular ports on one side of the septum and either a square or circular common port on the other side. For linear to circular conversion, driving one rectangular input produces right-hand polarisation and driving the other produces left-hand polarisation, at the common port. For circular to linear conversion, the output will appear at either of the rectangular ports depending on the sense of the circular polarisation at the common port.

Specifications

Each polariser is optimised for the frequency band of interest. Designs are typically suitable for use up to half-band. Performance depends on the bandwidth. VSWR better than 1.5, typical cross-polarisation better than 25dB. Can handle average power up to the capability of straight waveguide of the same rectangular size.



Typical Return Loss for model 26782



Model	Waveguide			Frequency (GHz)*	Min Return Loss (dB)	Max Insertion Loss (dB)	Mean Power (W)
	WG	R	WR				
15782	15	84	112	6.58 – 10.0	TBA	TBA	TBA
16782	16	100	90	8.20 – 12.5	20dB max	0.3dB	200
17782	17	120	75	9.84 – 15.0	20dB max	0.35dB	180
18782	18	140	62	11.9 – 18.0	TBA	TBA	TBA
21782	21	260	34	21.7 – 33.0	18dB max	0.5dB	TBA
26782	26	740	12	60.5 – 92.0	15dB max	0.5dB	TBA

*Extended frequency ranges available

Related Products

- Series 648: Dielectric Polariser
- Series 650, 652: Switchable Dielectric Polarisers
- Series 651: Corrugated Polariser

Relevant Supporting Products

- 243, 810, 820, 880: Horn Antennas

Custom Design

Custom built instruments can be supplied; please contact the sales team for more information.

sales@flann.com

Ordering

Model	Series	-	Flange
WG10 – WG32	782		See flann.com

Environmental Specifications

- Optimum operating temperature: TBA
- Non-Operating temperature: TBA