Anteral

POL

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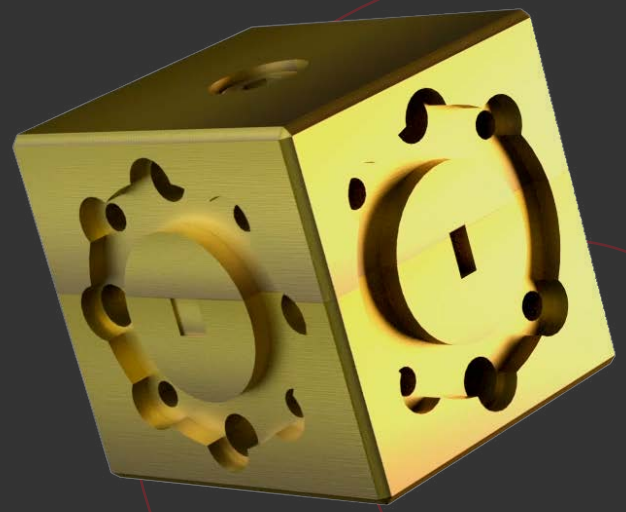

Polarizers

7 to 110 GHz, Low Axial Ratio and VSWR

DESCRIPTION

Anteral designs and manufactures **high-performance polarizers** (POLs) for communication systems. Depending on the client requirements, we offer the **best optimized design in terms of complexity and price**. Anteral has developed multiple designs of POLs up to 110 GHz.

This kind of components are used for either combine two orthogonal signals into one at a circular waveguide or to separate a signal that is input through a circular waveguide in two orthogonal signals. Both full waveguide band models and narrow band models with **enhanced axial ratio and isolation can be requested**.

APPLICATIONS

Polarizers are especially useful when high isolation and low axial ratio are required. They are widely used in SATCOM systems, space feeders, radar applications, communications, 5G and CATR feeders, among others.

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ELECTRICAL SPECIFICATIONS

Model	Frequency (GHz)	VSWR	Isolation (dB)	Axial Ratio (dB)	Polarization
POL-RL-SAT-X-01	7.25 - 7.75	1.15	35	0.25	Linear to RHCP&LHCP
POL-RL-SAT-X-02	7.9 - 8.4	1.15	35	0.25	Linear to RHCP&LHCP
POL-RL-SAT-X-03	7.25-7.75 | 7.9 - 8.4	1.15	70	0.3	Linear to RHCP(F1/F2)&LHCP(F2/F1)
POL-RL-SAT-X-04	7.25 - 8.4	1.15	35	0.25	Linear to RHCP&LHCP
POL-RL-SAT-KU-01	10.7 - 12.75 | 14-14.5	1.15	18	0.8	Linear to RHCP&LHCP
POL-RL-SAT-KKA-01	20.2 - 21.2 | 30 - 31	1.15	30	1	Linear to RHCP&LHCP
POL-RL-SAT-Q-01	37.5 - 42.5	1.1	25	0.3	Linear to RHCP&LHCP
POL-RL-SAT-V-01	47.2 - 52.4	1.1	25	0.3	Linear to RHCP&LHCP
POL-RL-SAT-5G-E-01	71 - 76 | 81 - 86	1.25	20	0.8	Linear to RHCP&LHCP
POL-RL-WR10-01	80 - 95	1.25	23	1	Linear to RHCP&LHCP
POL-RL-WR10-02	92 - 100	1.25	35	1	Linear to RHCP&LHCP
POL-R-SAT-X-01	7.25 - 8.4	1.1	30	0.1	Linear to RHCP/LHCP
POL-R-WR112-01	7.05 - 10	1.1	30	0.4	Linear to RHCP/LHCP
POL-R-WR90-01	8.2 - 12.4	1.1	30	0.4	Linear to RHCP/LHCP
POL-R-WR75-01	10 - 15	1.1	30	0.5	Linear to RHCP/LHCP
POL-R-WR62-01	12.4 - 18	1.1	30	0.5	Linear to RHCP/LHCP
POL-R-WR51-01	15 - 22	1.1	30	0.5	Linear to RHCP/LHCP
POL-R-SAT-KKA-01	17.3 - 31	1.15	25	1	Linear to RHCP/LHCP
POL-R-WR42-01	18 - 26.5	1.1	30	0.6	Linear to RHCP/LHCP
POL-R-WR34-01	22 - 33	1.1	28	0.7	Linear to RHCP/LHCP
POL-R-WR28-01	26.5 - 40	1.1	28	0.7	Linear to RHCP/LHCP
POL-R-WR22-01	33 - 50	1.1	25	0.7	Linear to RHCP/LHCP
POL-R-SAT-QV-01	37.5 - 42.5 | 47.2 - 52.4	1.1	28	0.4	Linear to RHCP/LHCP
POL-R-SAT-5G-E-01	71 - 76 | 81 - 86	1.25	20	0.8	Linear to RHCP/LHCP

All "RL" models feature a three-port configuration, presenting dual circular polarization at the common port. All "R" models feature a two-port configuration, presenting single circular polarization at the output port. This table contains only a few POL examples. All data are typical values. Contact us for other POL and more information.

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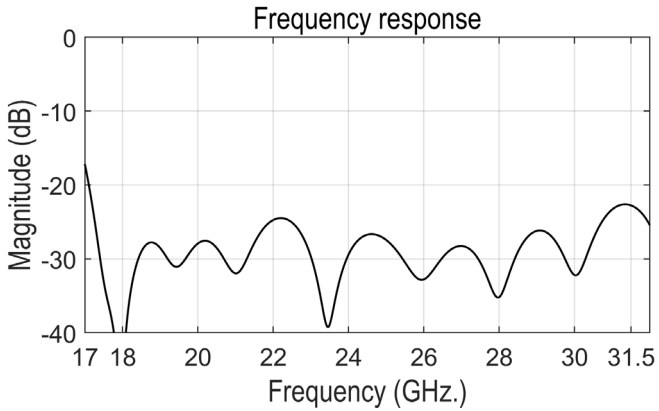
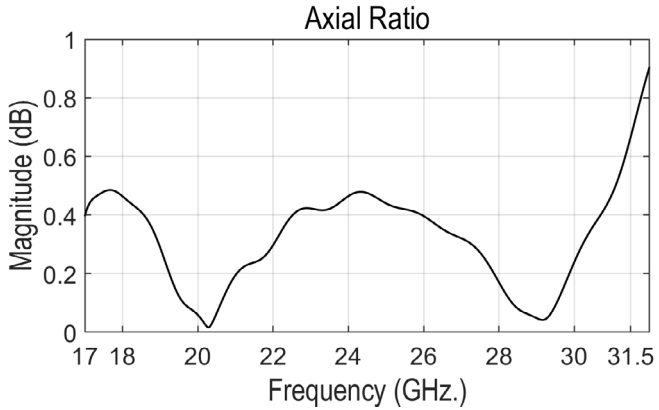
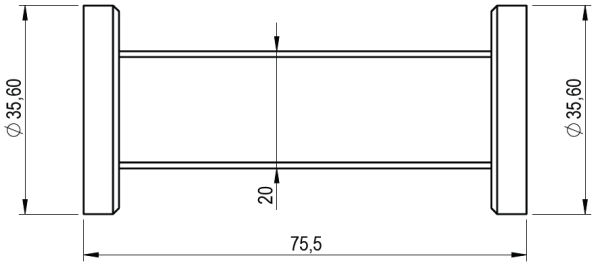
TYPICAL PERFORMANCE

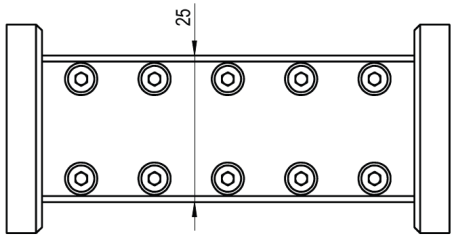




MECHANICAL OUTLINE

Flange	Standard UG-xxx/U
Operating temperature	-40ºC to +85ºC
External color	Aluminum. Gold plated in some cases.
Material	Aluminum.
Fabrication	In two half pieces.





Additional notes

All data are simulated. Typical performance data and mechanical outline correspond to POL-R-SAT-KKA-02 model.
Actual values could vary slightly. The return loss performance of all items is checked before delivery.

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