

DPLX - Diplexers

3 to 110 GHz, low Rejection and low VSWR

PRODUCT DESCRIPTION

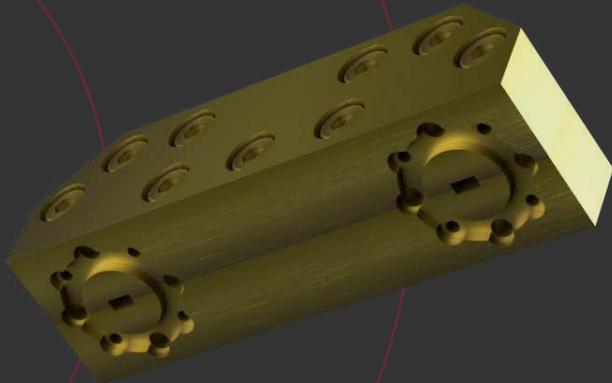
Anteral's diplexers are available in **different bands** covering a frequency range between 3 GHz and 110 GHz. COTSs and custom designs are available. All filters are designed for **minimum footprint and low mass**. Optimized assemblies for custom topologies.

RF and thermo-mechanical design, material and finish selection targeted at critical parameter optimization or best compromise performance. Material selection for optimum thermal stability.

Filters are **small and compact by design**. Low insertion losses and cutoff rejections are obtained depending on the structure. Most of the components are turning less. Can be integrated as part of antennas feed network. Contact Anteral for dimensions and other specifications due to the wide range of waveguide sizes and frequency ranges.

Narrow-band and wide-band performance can be chosen. Some of the available multiplexers are summarized in the following table. Contact us for other diplexer solutions and additional information.

- **Diplexers, Multiplexers:** Typically used for TTC and Payload subsystems. Input and output sections. High Performance in Power Handling, Multipaction, Corona and PIM.

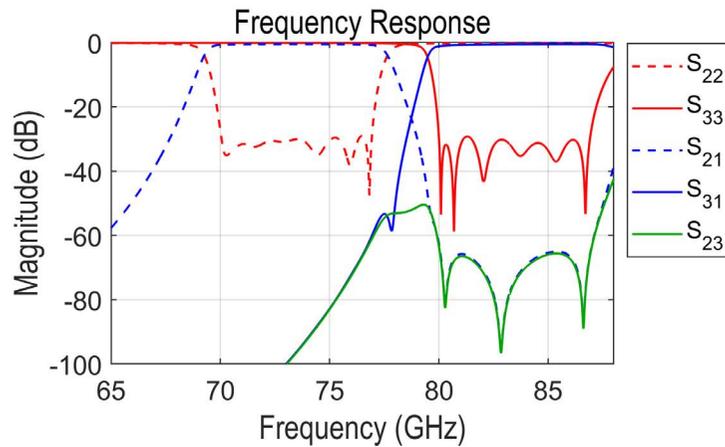


ELECTRICAL SPECIFICATIONS

Model	Pass band (GHz)	Rejected band (dB)	Return Loss (dB)	Insertion Loss (dB)	Attenuation (dB)	Interface Ports
DPLX-SAT-X-01	7.25 - 7.75 7.9 - 8.4	7.9 - 8.4 7.25 - 7.75	25	0.4	90 90	WR112
DPLX-SAT-KU-01	10.7 - 12.7 13.75 - 14.5	13.75-14.5 10.7-12.75	25	0.2	60 90	WR75
DPLX-SAT-KU-02	11 - 12.1 13 - 14	13 - 14 11 - 12.1	25	0.2	50 70	WR75
DPLX-SAT-K/KA-01	20.2 - 21.2 30 - 31	30 - 31 20.2 - 21.2	25	0.3	60 70	WR34
DPLX-SAT-K/KA-02	17.3 - 21.2 27 - 31	27 - 31 17.3 - 21.2	25	0.3	60 70	WR34
DPLX-5G-V-01	58.8 - 59.5 61 - 62	61 - 62 58.5 - 59.5	18	1	60 60	WR15
DPLX-5G-E-01	71 - 76 81 - 86	81 - 86 71 - 76	18	1	60 60	WR12

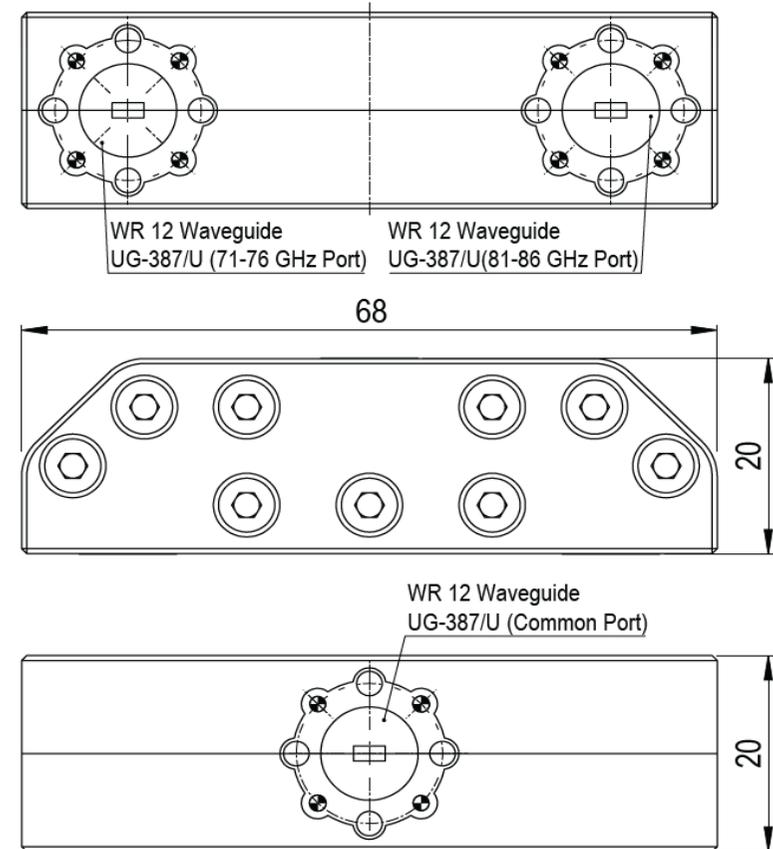
* This table contains only a few diplexer examples. All data are typical values. Contact us for other diplexers and more information.

TYPICAL PERFORMANCE



MECHANICAL OUTLINE

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



Additional notes

All data are simulated. Typical performance data and mechanical outline correspond to DPLX-5G-E-01 model. Actual values could vary slightly. The return loss performance of all items is checked before delivery.



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