Microwave Components

High-Power Circulators for Space & Terrestrial Use

Features

- Low loss
- High peak power (space, NTP)
- Waveguide interface
- Customizable
- ITAR-free, fully European

Typical applications

- Space
- Radar
- Telecom
- Research & Science

Description

These waveguide Y-junction ferrite circulators exhibit very low losses and tolerate high input peak and average power in space and other vacuum conditions, without multipactor or nonlinear excitations. They are an excellent choice for many waveguide systems, operating in space or terrestrial conditions.

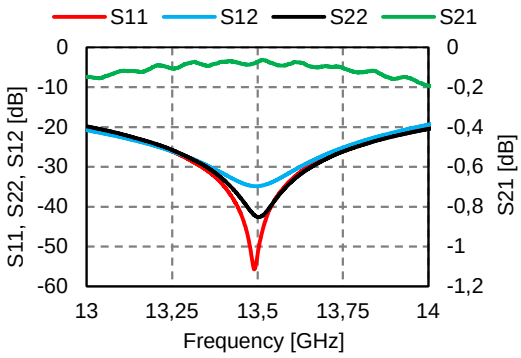
The circulators have been designed to comply with the demanding electrical, mechanical, and thermal requirements of space flight. Therefore, they are also well suited for many other applications with demanding environmental specifications and/or high reliability requirements.

The circulators can be customized to meet special needs, such as cryogenic operation, non-standard interfaces or geometries, wide operating temperature ranges or wider bandwidths.

Specifications*			
Frequency band	C	Ku	Ka
Insertion loss, dB	0.15		
Bandwidth, %	5 %		
Peak power (space), kW	5.1	2.9	2.5
Average power, kW	0.7	0.3	0.6
Port return loss, dB	25		
Port isolation, dB	25		
Interface	Standard WR		

*Typical

Typical performance



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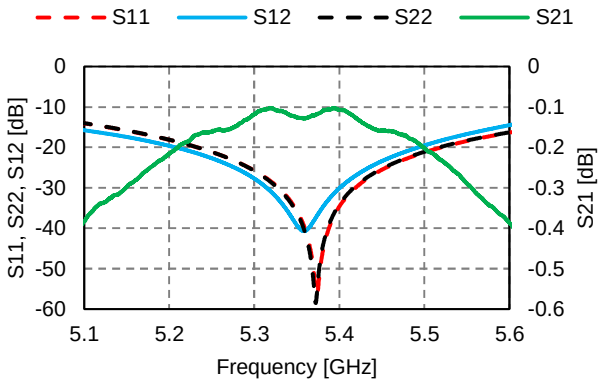
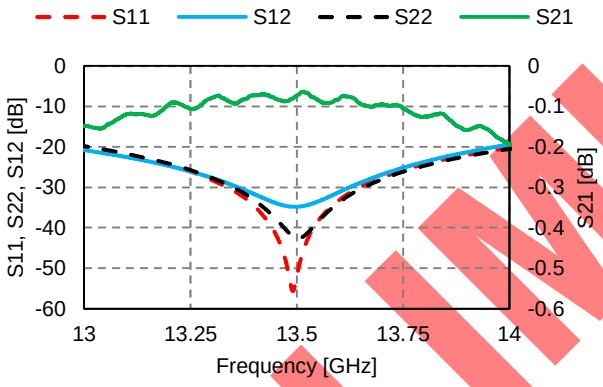
Microwave Components

C-band



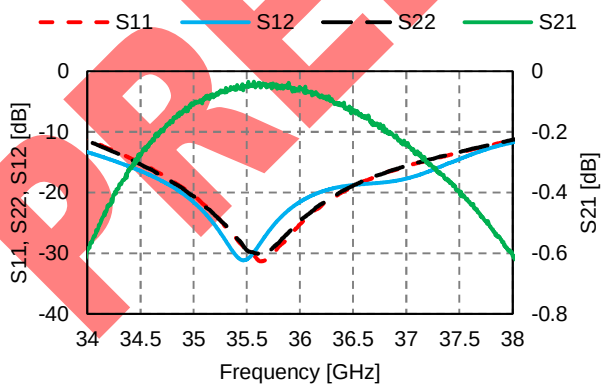
C-band high-power circulator	
Insertion loss, dB	0.15
Bandwidth, %	5 %
Peak power (space), kW	5.1
Peak power (NTP), kW	40
Average power, kW	0.7
Port return loss, dB	25
Port isolation, dB	25
Interface	WR137

Ku-band



Ku-band high-power circulator	
Insertion loss, dB	0.15
Bandwidth, %	5 %
Peak power (space), kW	2.9
Peak power (NTP), kW	14
Average power, kW	0.3
Port return loss, dB	25
Port isolation, dB	25
Interface	WR75

Ka-band



Ka-band high-power circulator	
Insertion loss, dB	0.15
Bandwidth, %	5 %
Peak power (space), kW	2.5
Average power, kW	0.6
Port return loss, dB	25
Port isolation, dB	25
Interface	WR28

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