

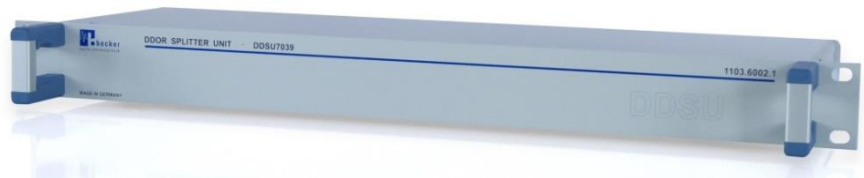
Bidirectional Splitter / Combiner Unit 2 ... 300 MHz

Features

- 3 independent RF channels
- rear connectors type N
- phase balance ≤ 3.00 deg
- amplitude balance ≤ 0.3 dB
- compact 19" design

Applications

IF distributions



At a Glance

DDSU7039 is a bidirectional distribution unit with optimized amplitude and phase balance. It is suitable for the frequency range from 2 MHz up to 300 MHz.

Three Independent Channels

The DDSU7039 device is equipped with three independent channels with optimized phase balance of <0.3 dB. Every channel is able to distribute an input signal to three output channels and combine three input signals to one common output signal.

Compact Design

The compact 19" 1 U design offers multiple ways of operation. The device can be integrated into 19" racks or it can be operated as a table top unit. For straightforward connection, DDSU7039 is supplied by mains voltage.

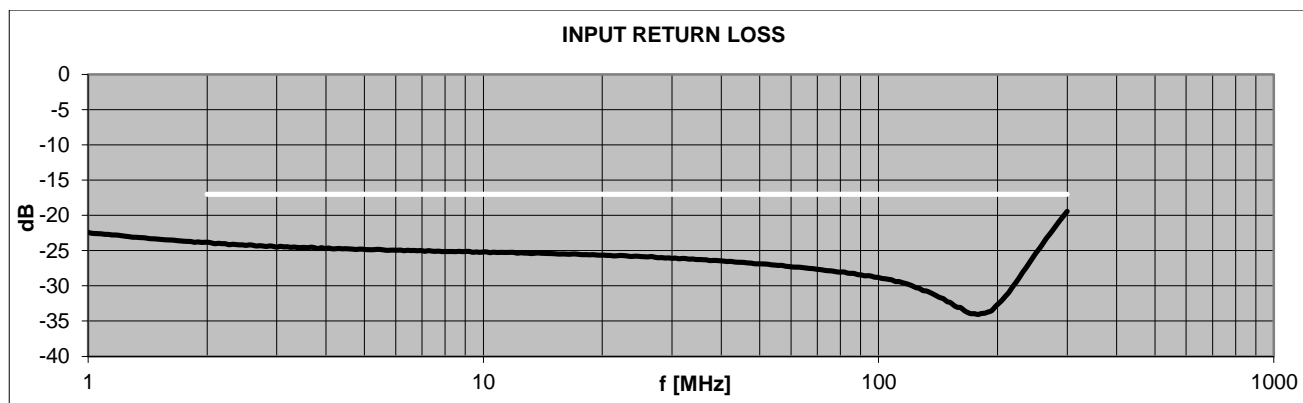
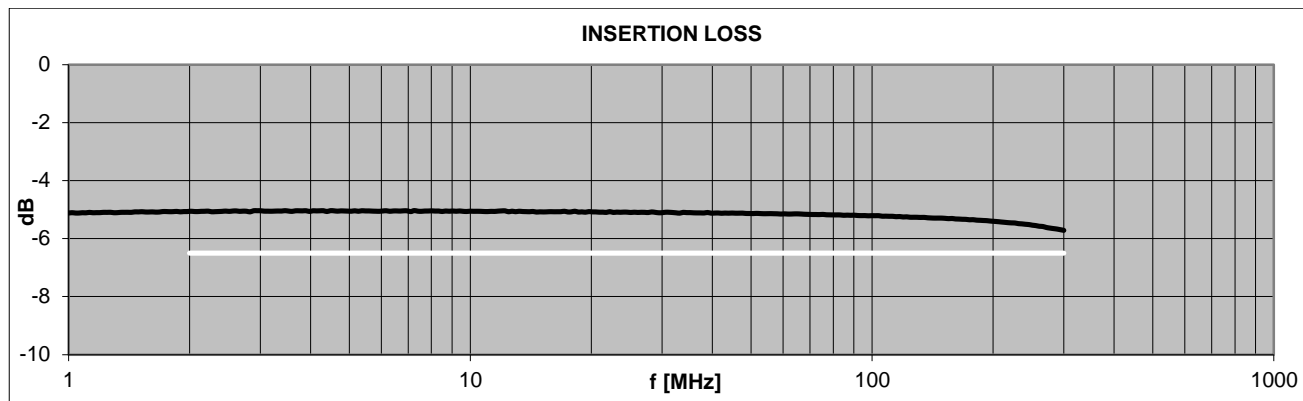
IF Specifications

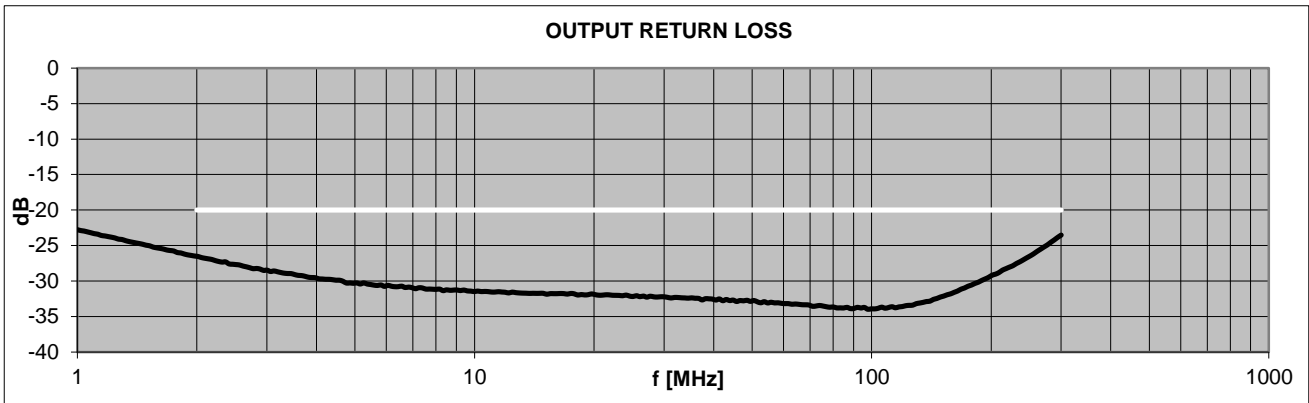
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
impedance	Z_{in} / Z_{out}		50		Ohm	
lower frequency	f_L			2	MHz	
upper frequency	f_U	300			MHz	
insertion loss	S_{21}		5.2	6.5	dB	including distribution loss
amplitude balance	ΔS_{21}		0.03	0.3	dB	
input return loss	S_{11}		-27	-17	dB	all ports terminated
output return loss	S_{22}		-33	-20	dB	all ports terminated
output isolation	I_o		-32	-22	dB	
channel isolation	I_{ch}	60	>110		dB	
phase balance	$dPHI_n$		0.35	3.00	deg	@ 70 MHz; per channel
phase variation	$dPHI_N$		0.50	4.00	deg pp	@ 70 MHz; between channels
maximum input power	$P_{in\ max}$			+20	dBm	
RF connectors			N female			

Common Specifications

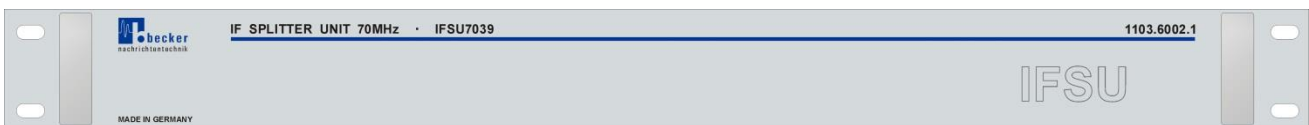
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
front panel colour		RAL7035				
dimensions	L x W x H	approx. 145 x 482 x 44			mm	19" 1 U, without handles and connectors
weight	m		1800		g	
operating temp. range	T_o	+5		+40	°C	ambiance
storage temp. range	T_s	-40		+70	°C	
ordering information		DDSU7039		1103.6002.1		

S-Parameters (typical response)

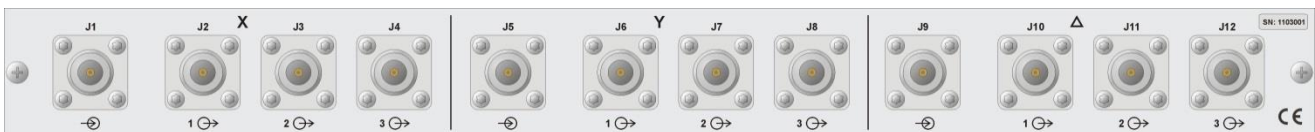




Front View



Rear View



Block Diagramm

