



CHP Max5000™ 1 GHz 3-Input Forward Path RF Amplifier (CHP-GAMP3) Technical Specification

Specifications

RF

Bandwidth, MHz	
Broadcast (BC) Port	50 to 1002
Narrowcast (NC) Ports, NC1 and NC2	400 to 1002
Response Flatness, typ., dB	
BC, NC1, NC2	±0.5
Response Tilt, max., dB	
BC Port at nominal tilt, NC1, NC2	±0.5
Return Loss for all four ports, min., dB	16
Gain, Fixed (Default), dB (Note 1)	
BC port	17
NC1 and NC2 ports	4
Gain, Adjustable Range, dB (Note 1)	
	Gain Range
	BC port 14 to 20 dB (0.25 dB steps)
	NC1 port BC Port Gain – 13 ± 3 (0.25 dB steps)
	NC2 port BC Port Gain – 13 ± 3 (0.25 dB steps)
Adjustable EQ Tilt (50 to 1002MHz, dB)	0 to 3 in 0.5 dB steps, BC port only
RF Output Testpoint, dB (Note 2)	–20 ± 0.5 @ 25°C; –20 ± 1.0 from 0 to 50°C
Port-to-port Isolation, min., dB	
BC to NC1, BC to NC2	50
NC1 to BC, NC2 to BC	42 at –10dB gain difference
NC1 to BC, NC2 to BC	48 at –16dB gain difference
NC1 to NC2, NC2 to NC1	50
Back Isolation, output port to any input port	60
Noise Figure for Broadcast Port, typ., dB	8 at 0dB tilt over the entire gain control range
Rated Input Level	15dBmV/channel maximum for analog loading at BC port 25dBmV/QAM channel maximum for digital loading at NC1 and NC2 ports
Performance Characteristic (Note 3)	
Composite Triple Beat (CTB), dBc	–85
Composite Second Order (CSO), dBc	–74
CIN, dBc	–70
XMOD, dBc	–79