Small Instrumentation Modules

SIM954 — 300 MHz dual-channel inverting amplifier

- · 300 MHz bandwidth
- ±10 V output voltage
- · Up to 1 A output current
- · <1 dB flatness
- · 4000 V/µs slew rate
- · 2 independent channels





-SIM954 300 MHz Amplifier

The SIM954 Amplifier is a 300 MHz, dual-channel inverting amplifier that delivers up to $\pm 10~V$ of output voltage and up to 1 A of output current. The amplifier can be used to drive many types of light laboratory loads without imposing the limitations and high cost of typical RF power amplifiers.

Specifications

Bandwidth (-3 dB) DC to 300 MHz

Gain 12 dB into 50Ω (inverting) Gain flatness <1 dB (DC to 100 MHz)

Crosstalk –60 dB (at 1 MHz), –40 dB (full BW)

VSWR 1.2:1 (DC to 100 MHz) 1.6:1 (DC to 300 MHz)

Isolation (output to input) –70 dB (DC to 1 MHz), –40 dB (full BW)

Slew rate $4000 \text{ V/}\mu\text{s}$ Output amplitude $\pm 10 \text{ V}$ (into 50Ω) Peak output current 1 A (into $\leq 7 \Omega$) Average output current 500 mA (sum of both channels)

Output impedance 3.3Ω Input impedance 50Ω

Input offset voltage
Input bias current
Operating temperature
Interface
Connectors

1 mV (trimmable)
10 μA (trimmable)
0 to 40 °C, non-condensing
Serial via SIM interface
BNC (4 front-panel)

DB15 (male) SIM interface

Power Supplied by SIM900 Mainframe, or optionally by a user-supplied DC

power supply (± 15 V and ± 5 V) $1.5" \times 3.6" \times 7.0"$ (WHD)

Dimensions $1.5" \times 3.6" \times 1.5"$

Weight 1.5 lbs.

Warranty One year parts and labor on defects in materials and workmanship

Ordering Information

SIM954 300 MHz inverting amplifier



