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 ±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 50 Ω (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 V/µs
Output amplitude	±10 V (into 50 Ω)
Peak output current	1 A (into ≤7 Ω)
Average output current	500 mA (sum of both channels)
Output impedance	3.3 Ω
Input impedance	50 Ω
Input offset voltage	1 mV (trimmable)
Input bias current	10 µA (trimmable)
Operating temperature	0 to 40 °C, non-condensing
Interface	Serial via SIM interface
Connectors	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)
Dimensions	1.5" × 3.6" × 7.0" (WHD)
Weight	1.5 lbs.
Warranty	One year parts and labor on defects in materials and workmanship

Ordering Information

SIM954	300 MHz inverting amplifier