

ATF16521-11

1 MHz - 6.0 GHz 6-bit Digital Attenuator



20 Pin 4×4 mm QFN Package

Product Overview

The ATF16521-11 is a 50Ω, HaRP™ technology-enhanced, 6-bit RF Digital Step Attenuator (DSA), manufactured on silicon-on-insulator (SOI) technology on a sapphire substrate. The ATF16521-11 covers a 31.5 dB attenuation range in 0.5 dB steps, which also has the characteristics of low power consumption and low insertion loss. An integrated digital control interface supports both Serial and Parallel programming of the attenuation. this device ideal for many broadband wireless applications, such as base station, wireless LAN, WiMAX, etc.

Key Features

Frequency range: 1 MHz – 6 GHz
Attenuation: 0.5 dB steps to 31.5 dB

Insertion loss: 1.8 dB @ 4 GHz

Parallel and Serial programming interfaces

IP0.1dB: 29dBmIIP3: 47dBm

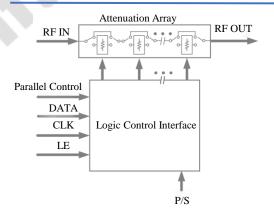
Attenuation error: ±(0.15 + 3.5% x ATT) @4GHz

ESD 2000V@HBM

No overshoot during switching

Small QFN (20-pin, 4 × 4 mm) package

Function Block Diagram



ATF16521-11 Block Diagram

Applications

- Small Cell
- Distributed Antenna System (DAS)
- Repeater (RPT)
- Test instrument
- IoT