

Temperature-Compensated Attenuator Chip

AAS6101

Product Datasheet

V1.0

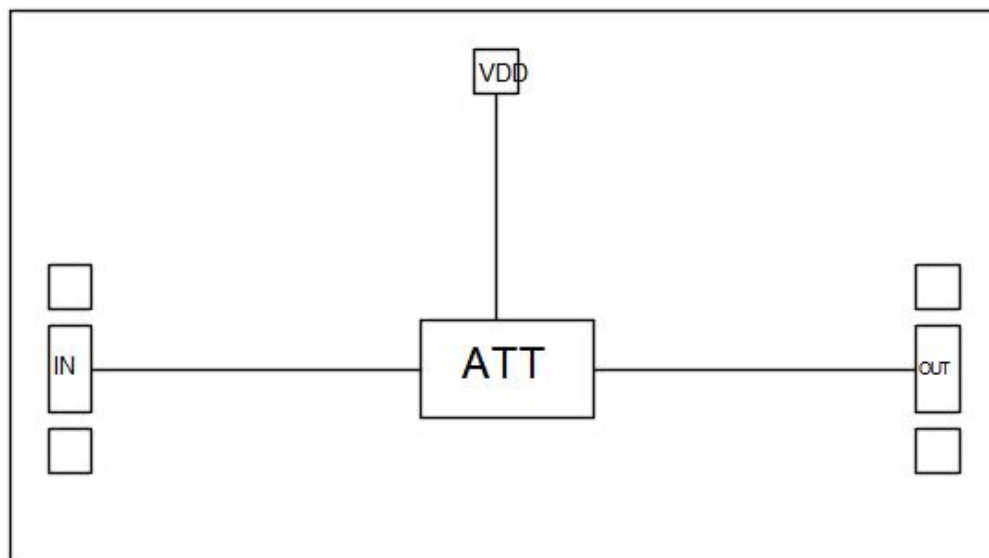
1. Product Features

- Frequency Range: 0–20 GHz
- Insertion Loss: 8.5 dB
- Attenuation Compensation Range: 4.5 dB
- Bias Condition: $V_D = -5\text{ V}$, $I_{DQ} = 3.5\text{ mA}$
- Chip Dimensions: $0.95\text{ mm} \times 0.55\text{ mm} \times 0.1\text{ mm}$

2. Functional Description

The SX6101 is a temperature-compensated attenuator chip operating from 0 to 20 GHz, providing an insertion loss of 8.5 dB and an attenuation compensation range of 4.5 dB. The chip features a $50\ \Omega$ port impedance and is grounded via backside metallization.

3. Block Diagram



4. Typical Applications

Suitable for applications including communications, radar, and other related fields.

5. Electrical Performance Parameters

5.1 RF Characteristics

Unless otherwise specified, all electrical characteristics are measured under the following conditions: $V_D = -5.0\text{ V}$, $I_{DQ} = 3.5\text{ mA}$, small-signal $P_{in} = -20\text{ dBm}$, $T_A = +25\text{ }^\circ\text{C}$