AJAV-6101

WCDMA/HSPA Band | Power Amplifier

Product Brief

Description

The AJAV-6101 is a complete, high-performance power amplifier for W-CDMA and HSPA wireless communications. Based on a unique, patented architecture, the AJAV-6101 integrates circuitry for TX filtering, RF coupling, power regulation, input and output matching, and power control. The PA (power amplifier) is powered by a single connection to the battery and is implemented in a standard CMOS process.

Features

- High-performance 3G power amplifier
  - UMTS Band I (1920 MHz to 1980 MHz)
  - W-CDMA, HSPA, and HSPA+ Compliant
- Integrated TX filtering
  - Delivers best noise in the industry
- Integrated directional coupler
- Integrated regulators and PA bias
- Single direct connection to the battery
  - No external switches or isolation inductors
- High linear efficiency
- Low average current
- High capacity CMOS process
- Small 3 mm × 3 mm package

Applications

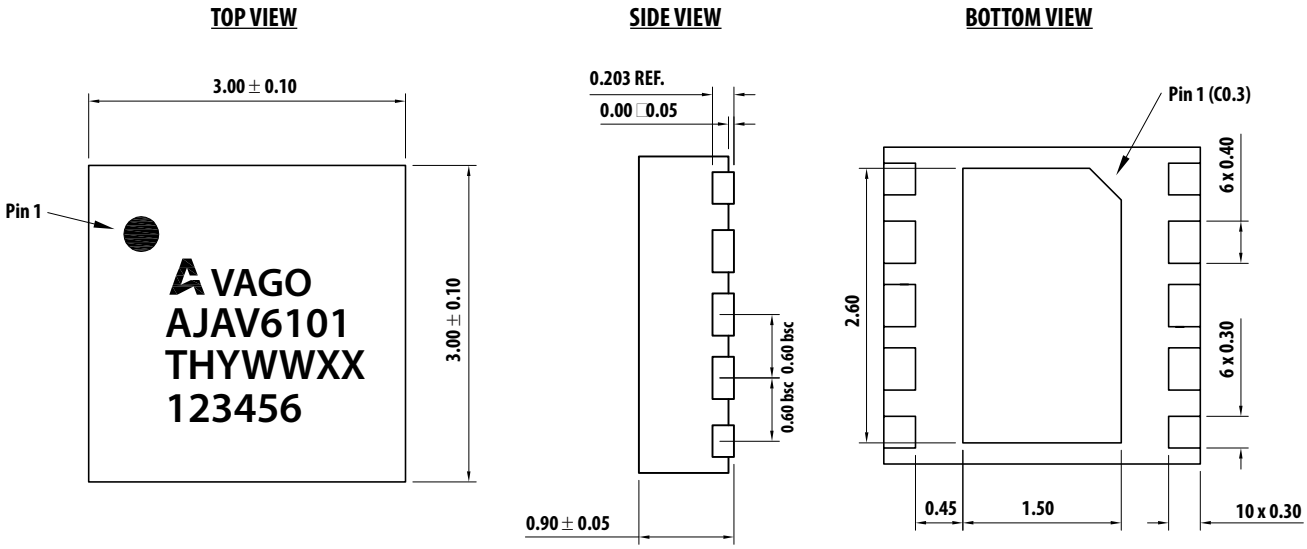
- Smartphones, data cards, and 3G modules
- Tablets, netbooks and network PCs
- E-books and wireless electronic readers

Ordering Information

Part Number	Description	Package Type	Operating Temperature	Quantity	Container[a]
AJAV-6101-BLK	W-CDMA/HSPA Band I Power Amplifier	3 × 3 DFN	–25 °C to +85 °C	100	Antistatic bag
AJAV-6101-TR1				1000	Tape and reel

a. Shipping method is tape and reel, quantity 1000 pieces per reel.

Marking Specifications and Package Dimensions



AJAV6101 = Device Code
T = Country Code
H = Manufacturing Site Code
Y = Year
WW = Work Week
XX = Assembly lot #
123456 = International Marking Identification

Tolerances:
.x ± .1
.xx ± .05

Dimensions are in mm

Pin Description

Pin #	Name	Description
1	VBAT	DC supply voltage
2	RFI	RF input
3	VM1	Mode control
4	VM0	Mode control
5	VEN	PA enable
6	CPLO	Coupler output

Pin #	Name	Description
7	GND	Ground
8	CPLI	Coupler input
9	RFO	RF output
10	VBAT	DC supply voltage
epad	GND	Ground

For product information and a complete list of distributors, please go to our web site:
www.avagotech.com

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Lead (Pb) Free
RoHS 6 fully compliant
RoHS 6 fully compliant options available;
-xxxE denotes a lead-free product