

ACPM-9413

LTE Band 13 MIPI ET/APT PA

2.0 mm × 2.5 mm

Power Amplifier Module

Product Brief



Description

The ACPM-9413 is a fully matched 10-pin surface mount power amplifier module developed for LTE Band 13. The 2 mm × 2.5 mm form-factor package is self contained, and it incorporates 50-ohm input and output matching networks.

The ACPM-9413 features CoolPAM circuit technology that supports two power modes—low and high. The CoolPAM is a stage bypass technology that enhances PAE (power added efficiency) at low power range.

The power amplifier is manufactured on an advanced InGaP HBT (hetero-junction bipolar transistor) MMIC (microwave monolithic integrated circuit) technology that offers state-of-the-art reliability, temperature stability, and ruggedness.

Features

- Thin package (0.93 mm typical)
- Excellent linearity in envelope tracking mode and average power tracking mode
- MIPI RFFE interface
- Two-mode power
- Quiescent current control for high power mode and low power mode
- Ten-pin surface mounting package
- Internal 50-ohm matching networks for both RF input and output
- Separate drive and output VCC supplies
- Low bypass capacitance
- Green – Lead-free and RoHS compliant

Applications

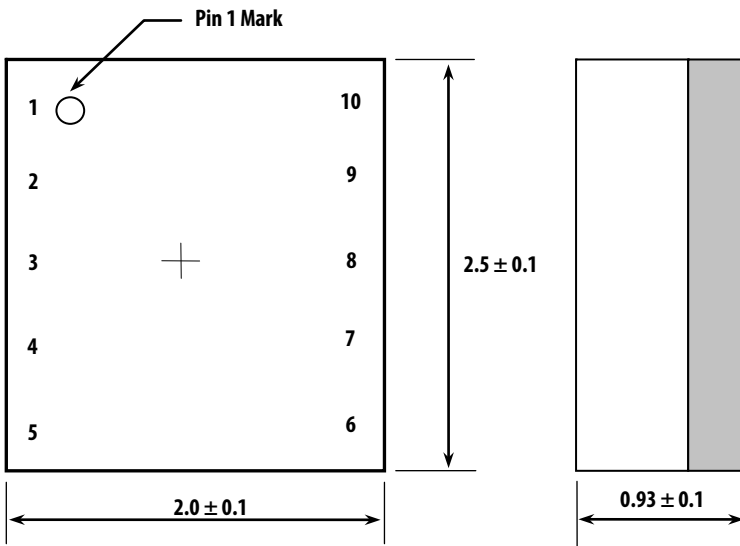
- Band 13 LTE

Ordering Information

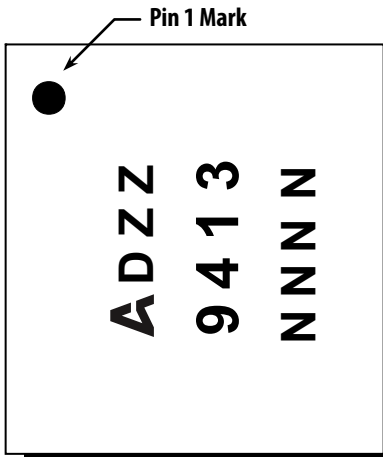
Part Number	Number of Devices	Container
ACPM-9413-TR1	1,000	178 mm (7 in.) tape/reel

Package Dimensions

The dimensions are in millimeters.



Marking Specification



- D – Date Code
- ZZ – Assembly Lot Identification
- 9413 – Device Code

Pin Description

Pin #	Name	Description
1	VCC1	DC supply voltage, connect to the RF stages' collector to which APT is applied (0.5V~3.5V)
2	RFIN	RF input
3	Vbat	DC supply voltage, connect to the bias circuitry with a fixed voltage (higher than 3.0V)
4	Vio	RFFE enable
5	Sdta	RFFE data
6	Sclk	RFFE clock
7	GND	Ground
8	SEL	RFFE duplicate device select
9	RFOUT	RF output
10	VCC2	DC supply voltage, connect to the RF stages' collector to which APT is applied (0.5V~3.5V)

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

www.avagotech.com

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