ACPM-9407

LTE Band 7 MIPI ET PA 2.0 mm × 2.5 mm Power Amplifier Module

Product Brief



Description

The ACPM-9407 is a fully matched 10-pin surface mount power amplifier module developed for LTE Band 7. The 2 mm \times 2.5 mm form-factor package is self contained, and it incorporates 50-ohm input and output matching networks.

The ACPM-9407 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 (0.82 mm typical)
- Small size $(2 \text{ mm} \times 2.5 \text{ mm})$
- Excellent linearity in envelope tracking mode
- High efficiency at peak power envelope power
- Compatible with MIPI RFFE
- Two-mode power
- Quiescent current control for high power mode and low oower 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

Application

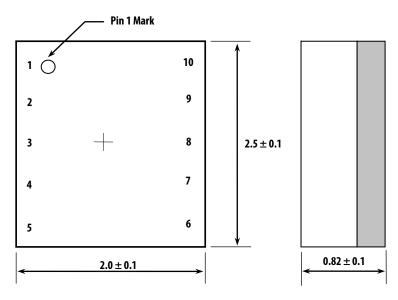
■ LTE Band 7

Ordering Information

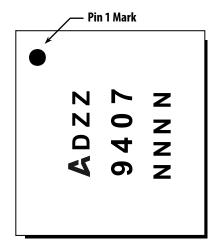
Part Number	Number of Devices	Container
ACPM-9407-TR1	1,000	178 mm (7 in.) tape/reel

Package Dimensions

The dimensions are in millimeters.



Marking Specification



D – Date Code

ZZ – Assembly Lot Identification

9407 - Device Code

Pin Description

Pin#	Name	Description	
1	VCC1	DC supply voltage, connect to the RF stages' collector to which APT/ET 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	NC	No connection	
9	RFOUT	RF output	
10	VCC2	DC supply voltage, connect to the RF stages' collector to which APT/ET 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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