ACPM-7600

Multiband Multimode PA Quad-Band GSM/EDGE and Multi Mode B1/B2(25)/B3/B4/B5(26)/B8

Product Brief

Description

The ACPM- 7600 is a multiband multimode PA that supports GMSK and 8-PSK modulation schemes and UMTS/LTE bands 1, 2(25), 3, 4, 5/26 and 8. The ACPM-7600 is designed to support both ET (envelope tracking) and APT (average power tracking) operation.

Input and output terminals are internally matched to 50 ohms. The power amplifier is manufactured on an advanced InGaP HBT technology offering state-of-the-art reliability, temperature stability and ruggedness. This module is housed in a cost effective, extremely small and thin 5 mm × 7 mm package.

Features

- Supports both ET and APT
- Quad Band GSM/EDGE
- UMTS B1, B2/25, B3, B4, B5/26, and B8
- Compatible with MIPI RFFE
- Small Size (7 mm × x5 mm)
- Excellent linearity
- High efficiency
- Bias (quiescent current) control by MIPI RFFE
- 42-pin surface mounting package
- Internal 50 Ω matching networks for both RF input and output
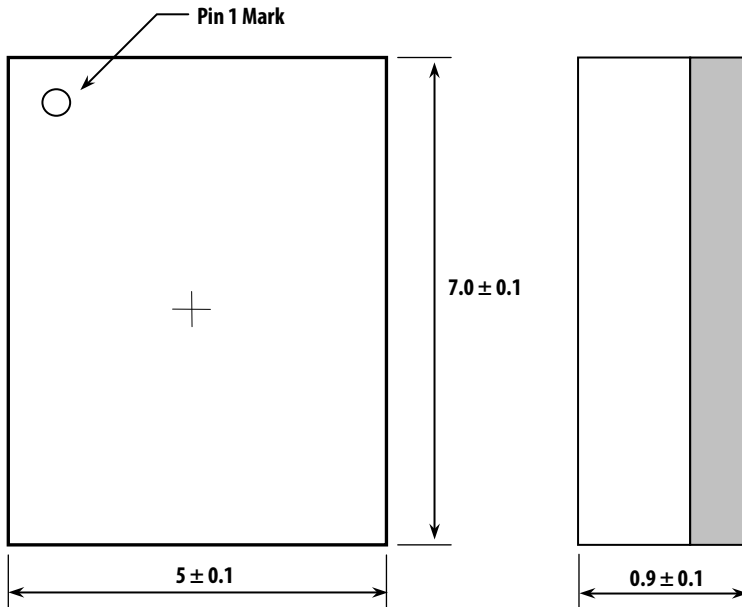- Green – lead-free and RoHS compliant

Applications

- GSM850/900, DCS1800/PCS1900
- UMTS/LTE B1, C2K BC6
- UMTS/LTE B2, LTE B25, C2K BC1
- UMTS/LTE B3
- UMTS/LTE B4, C2K AWS
- UMTS/LTE B5, LTE B26, C2K BC0
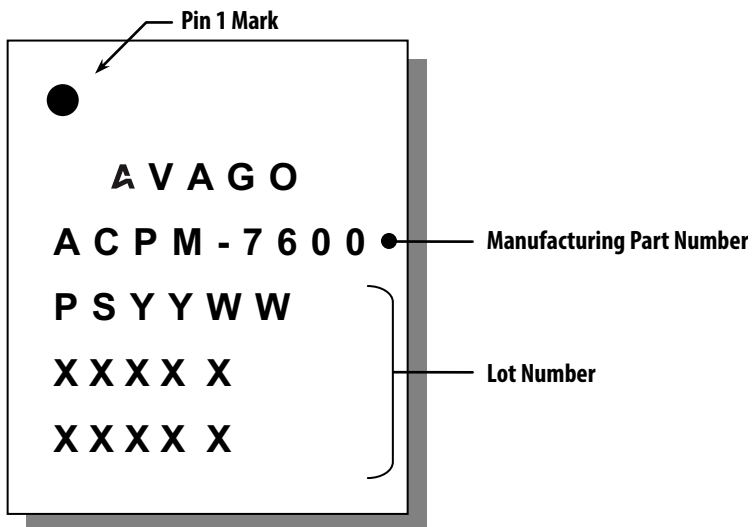- UMTS/LTE B8

Ordering Information

Part Number	Number of Devices	Container	Description
ACPM-7600-TR1	1000	178 mm (7 in.) tape/reel	ET and APT
ACPM-7600-CV1	1000	178 mm (7 in.) tape/reel	APT only
ACPM-7600-BLK	100	Bulk	Bulk for ET and APT

Package Dimensions

Pin 1 Mark

7.0 ± 0.1

5 ± 0.1

0.9 ± 0.1

All dimensions in millimeters

Marking Specification

Pin 1 Mark

A V A G O

A C P M - 7 6 0 0 ●——— **Manufacturing Part Number**

P S Y Y W W

X X X X X ——— **Lot Number**

X X X X X

Pin Description

Pin layout (top row, left to right): 42 GND, 41 GND, 40 GND, 39 GND, 38 GND, 37 NC, 36 GND

Left side (top to bottom):
- 1 RF_IN_B1_B2
- 2 RF_IN_B3_B4
- 3 RF_IN_B26
- 4 RF_IN_B5_B8
- 5 GND
- 6 VIO
- 7 GND
- 8 SCLK
- 9 SDATA
- 10 GND
- 11 VBATT
- 12 GND
- 13 RF_IN_GSM_HB
- 14 RF_IN_GSM_LB

Right side (top to bottom):
- 35 RF_OUT_B1
- 34 RF_OUT_B3
- 33 RF_OUT_B4
- 32 RF_OUT_B2
- 31 RF_OUT_B5_B26
- 30 GND
- 29 RF_OUT_B8
- 28 VCC1
- 27 VCC2
- 26 VCC GSM
- 25 GND
- 24 RF_OUT_GSM_HB
- 23 GND
- 22 RF_OUT_GSM_LB

Bottom row (left to right): 15 GND, 16 GND, 17 GND, 18 GND, 19 GND, 20 GND, 21 GND