

# PTFA211801E PTFA211801F

WCDMA RF Power FET

## The PTFA211801E and PTFA211801F

Two devices from our next generation of GOLDMOS devices, these high-gain devices bring rugged quality to your amplifier designs. Specifically optimized for WCDMA applications, the PTFA211801E and PTFA211801F deliver up to 180 W under CW conditions. These internally matched GOLDMOS® FETs are single-ended and laterally diffused, and operate with 15.5 dB linear gain. Full gold metallization and integrated ESD protection ensure excellent device lifetime and reliability.

#### Features

- Optimized for 2110 MHz to 2170 MHz
- Thermally Enhanced Packaging
- Proven ruggedness
- Broadband internal matching
- Full gold metallization
- Integrated ESD protection: Human Body Model, Class 1 (minimum)
- Excellent thermal stability
- Low HCI drift
- Capable of handling 10:1 VSWR @ 30V, 180 W (CW) output power
- Qualified for operation up to 32 V

#### Performance

- Typical two-carrier 3GPP WCDMA performance
  - Average output power = 45 W
  - Gain = 15.5 dB
  - Efficiency = 28%
    - IM3 = -37 dBc
    - ACPR < -42 dBc
    - 10 MHz carrier spacing
- Channel BW = 3.84 MHzThermal Resistance = 0.22 °C/W

Type List

Туре	Output Power	Linear Gain	Supply Voltage	Package Type	Package
PTFA211801E	180 W	15.5 dB	28 - 32 V	Thermally enhanced	30260
PTFA211801F	180 W	15.5 dB	28 - 32 V	Thermally enhanced,	31260
				earless	

www.infineon.com/rfpower

Wireless Communication



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We hereby disclaim any and all warranties, including but not limited to warranties of non-infringement, regarding circuits, descriptions and charts stated herein.

#### Information

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office.

## Warnings

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office.

Infineon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reason-ably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.

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