



Fact Sheet

Linear Amplifiers

Overview

Freescale linear amplifier products deliver industry-leading power efficiency for today's demanding linear, high-speed data applications. Based on InGaP HBT technology, these amplifiers contain active bias networks for excellent over temperature performance and require minimal impedance matching for ease of use over a broad frequency range.

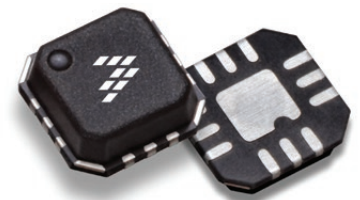
High Performance Amplifiers

Part Number	Frequency Range (MHz)	Test Frequency (MHz)	Small Signal Gain (dB)	Gain Stages	P1dB (dBm)	OIP3 (dBm)	Supply Voltage (V)	Supply Current (mA)	Package
MMZ09312B ⁽¹⁾	400–1000	900	31.7	2	29.6	42	3–5	74	QFN 3 × 3
MMA20312BV	1800–2200	2140	27.2	2	30.5	44.5	3–5	70	QFN 3 × 3
MMA20312B	1800–2200	2140	27.2	2	30.5	44.5	5	70	QFN 3 × 3
MMA25312B ⁽¹⁾	2300–2700	2500	26	2	31	40	3–5	124	QFN 3 × 3
MMZ25333B	1500–2700	2600	43	3	32	42.8	5	265	QFN 4 × 4
MMZ09332B*	400–1000	900	29	2	33	48	5	110	QFN 3 × 3
MMZ25332B ⁽¹⁾	1800–2800	2500	26.5	2	33	48	3–5	390	QFN 3 × 3
MMZ25332B4*	1800–2800	2500	26.5	2	33	48	5	390	QFN 4 × 4

⁽¹⁾ On chip power detector * Preliminary Data

Target Applications

- BTS PA driver
- WLAN (IEEE® 802.11 b/g/n), WiMAX, LTE, GSM/EDGE, W-CDMA/HSPA, CDMA/EVDO, TD-SCDMA
- Smart Energy (IEEE® 802.15.4 ZigBee®)
- Small-cell transmitters (femtocell, picocell)
- DAS
- SATCOM



UMTS Frequency Bands

Operating Band	Frequency Band (MHz)	UL (User Tx) Frequency Range (MHz)	DL (User Rx) Frequency Range (MHz)	Recommended Product
I	2100	1920–1980	2110–2170	MMA20312BV/MMZ25332B/B4/MMZ25333B
II	1900	1850–1910	1930–1990	MMA20312BV/MMZ25332B/B4/MMZ25333B
III	1800	1710–1785	1805–1880	MMA20312BV/MMZ25332B/B4/MMZ25333B
IV	1700	1710–1755	2110–2155	MMA20312BV/MMZ25332B/B4/MMZ25333B
V	850	824–849	869–894	MMZ09312B/MMZ09332B
VI	800	830–840	875–885	MMZ09312B/MMZ09332B
VII	2600	2500–2570	2620–2690	MMA25312B/MMZ25332B/B4/MMZ25333B
VIII	900	880–915	925–960	MMZ09312B/MMZ09332B
IX	1700	1749.9–1784.9	1844.9–1879.9	MMA20312BV/MMZ25332B/B4/MMZ25333B
X	1700	1710–1770	2110–2170	MMA20312BV/MMZ25332B/B4/MMZ25333B
XI	1500	1427.9–1447.9	1475.9–1495.9	—
XII	700	698–716	728–746	MMZ09312B/MMZ09332B
XIII	700	777–787	746–756	MMZ09312B/MMZ09332B
XIV	700	788–798	758–768	MMZ09312B/MMZ09332B

Freescale offers comprehensive global in-region support to help you with your design.

Contact your local Freescale sales office or authorized Freescale distributor for additional information and sample availability.

For more information, visit freescale.com/RFlowpower

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