New Product Announcement!

Ultra Low Noise MMIC Amplifier PMA-545+

50Ω 0.05 to 6 GHz

Click here for data sheet

3mm x 3mm MCLP [EIA: QFN) Pkg

The Big Deal

- Ultra Low Noise
- Ultra High IP3
- Up to 6 GHz

Pricing: **$1.49** **(QTY 10-49)**

Product Overview

Mini-Circuits PMA-545+ is a E-PHEMT based Ultra-Low Noise MMIC Amplifier operating from 50 MHz to 6 GHz with a unique combination of low noise and high IP3 making this amplifier ideal for sensitive receiver applications. This design operates on a single 3V supply and is internally matched to 50 Ohms.

Summary Performance at 1 GHz		
Operating Frequency:	0.05 to 6.0	GHz
Noise Figure	0.8	dB, typ.
Gain	20	dB, typ.
IP3	+36	dBm, typ.
P_{OUT} (at 1dB)	+20	dBm, typ.
DC Current (at 3V)	80	mA, typ.

Key Features

Feature		Advantages
Ultra Low Noise:	0.8 dB NF at 1GHz	Industry Leading Noise Figure, measured in a 50 Ohm environment – without any external matching
High IP3:	+36 dBm IP3 at 1GHz	Combining Low Noise and High IP3 makes this MMIC amplifier ideal for Low Noise Receiver Front End (RFE) because it gives the user advantages at both ends of the dynamic range: sensitivity & two-tone IM dynamic range
Output Power:	+20 dBm at 1GHz	The PMA-545+ maintains consistent output power capability over the full operating temperature range making it ideal to be used in remote applications such as LNB's as the L Band driver stage
Broad Band:	0.05 to 6.0GHz	Broadband covering primary wireless communications bands: Cellular, PCS, LTE, WiMAX
Internally Matched		No external matching elements required to achieve the advertized noise and output power over the full band
MCLP Package		Low Inductance, repeatable transitions, excellent thermal pad
Max Input Power	+20 dBm	Ruggedized design operates up to input powers often seen at Receiver inputs. Can operate up to 100 mA without the need of an external limiter
High Reliability		Low, small signal operating current of 80 mA nominal maintains junction temperatures typically below 130°C at 85°C ground lead temperature