

New Product Announcement!

Ultra Low Noise

High Linearity MMIC Amplifier

CMA-545+

50Ω 0.05 to 6 GHz



The Big Deal

- Ceramic, Hermetically sealed, Nitrogen Filled
- Low profile case, .045" high
- Ultra Low Noise Figure, 0.8 dB typ.
- Output Power, +20dBm at 1GHz

Pricing: **\$4.95** (QTY 20)

Product Overview

Mini-Circuits CMA-545+ delivers a unique combination of ultra low noise and high IP3 performance, ideal for sensitive receiver applications. The E-PHEMT amplifier die is bonded to a multilayer integrated LTCC substrate, and then hermetically sealed under a controlled nitrogen atmosphere with gold-plated covers and eutectic AuSn solder. As a result, this rugged amplifier has met MIL requirements for gross leak, fine leak, thermal shock, vibration, acceleration, mechanical shock, and HTOL. The CMA-545+ operates on a single 3V supply and is internally matched to 50Ω, with no external matching components required.

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: +35 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 & high level operation. |
| Output Power: +20 dBm at 1GHz | The CMA-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. |
| Ceramic Hermetic Package | Low Inductance, repeatable performance, excellent reliability. |
| Max Input Power +20 dBm | Ruggedized design operates up to input powers often seen at Receiver inputs. Can operate up to +20 dBm input without the need of an external limiter. |
| High Reliability | Small signal operating current of 80 mA nominal maintains junction temperatures typically below 130°C at 105°C package terminals. |



For detailed performance specs & shopping online see web site

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IFIRF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.