



DAS Products

DATA SHEET

High Power Low PIM Attenuator

ATO-68-50-xx-F2



- CCI's high power low PIM attenuator support 50W across a wideband from 680 to 3800 MHz
- Excellent return loss performance
- Wide range of attenuation values from 3 to 30 dB
- Available with 4.3-10 Connectors
- High reliability design
- Designed for ultra low PIM performance
- RoHS compliant

Overview

CCI's ATO-68-50 series of high power low PIM attenuators cover a broad frequency range from 680 to 3800 MHz, while delivering high power performance of up to 50 Watts. Each model has a nominal and highly accurate attenuation value with excellent return loss performance. The units are offered in a wide range of attenuation values from 3 to 30 dB and are ideal for optimizing RF power distribution, which is often required for distributed antenna systems (DAS).

The extremely wide frequency range allows use with multiband and broadband antennas as well as leaky cable systems. The high power handling makes these attenuators well-suited for use with wireless base stations. The attenuators have been designed and constructed with minimal solder joints which assures the correct dissipative loss and enhances the overall reliability.

The attenuators are available in single configuration. The RF ports are configured with 4.3-10 connectors.

CCI filter and combiner products are designed and produced to ISO 9001 certification standards for reliability and quality at our state-of-the-art engineering and manufacturing facilities.



SPECIFICATIONS

High Power Low PIM Attenuator

ATO-68-50-xx-F2

Electrical Specification

RF Parameter	ATO-68-50-03-F2	ATO-68-50-06-F2	ATO-68-50-10-F2	ATO-68-50-15-F2	ATO-68-50-20-F2	ATO-68-50-30-F2
Frequency Range	680 - 3800 MHz					
Attenuation	3.0 dB	6.0 dB	10.0 dB	15.0 dB	20.0 dB	30.0 dB
Accuracy	±0.8 dB	±0.8 dB	±1.0 dB	±1.2 dB	±1.3 dB	±1.6 dB
Return Loss	≥ 19 dB					

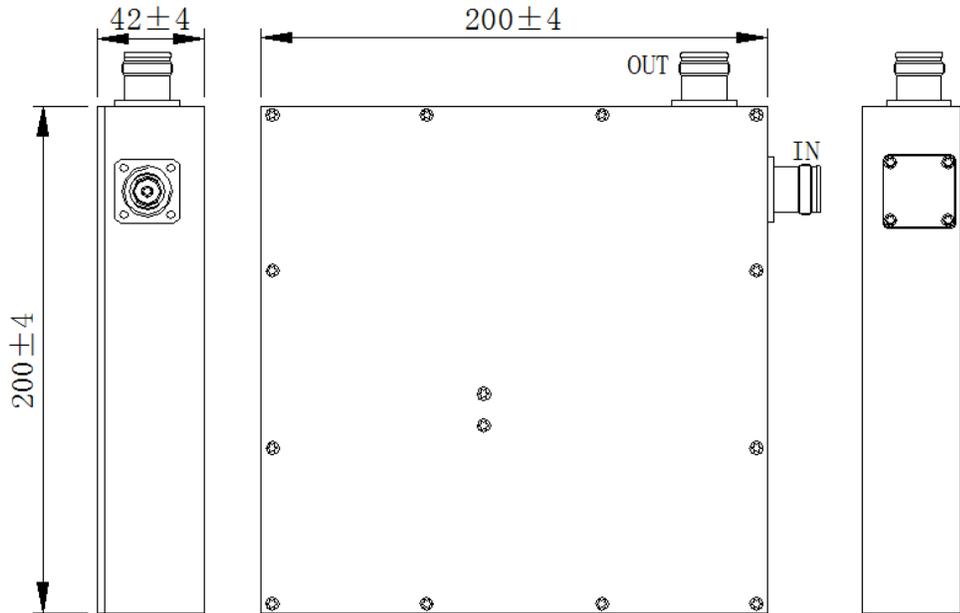
General Characteristics by Model	ATO-68-50-xx-F2
Continuous Average Power	50 W
Peak Envelope Power	500 W maximum
Impedance	50 ohms
Intermodulation Performance	<-112 dBm (-155 dBc) min; (2x +43 dBm tones)

Environmental Specification

Operating Temperature	-35°C to +75°C
Ingress Protection	IP65
Relative Humidity	5% - 95%
MTBF	>500,000 hours
Lightning Protection	8/20us, ±20KA max, 10 strikes each, IEC61000-4-5

Mechanical Specification

Model	ATO-68-50-xx-F2
Connectors	4.3-10 Female x 2
Housing Dimensions	200 x 200 x 42 mm (7.87 x 7.87 x 1.65 in.)
Weight	2.08 kg (4.6 lbs)
Mounting	Pole/Wall Mounting Bracket included



High Power Attenuator with 4.3-10 Female Connector (ATO-68-50-xx-F2) Outline Drawing



DAS Products

STANDARDS & CERTIFICATIONS

High Power Low PIM Attenuator

ATO-68-50-xx-F2

Parts & Accessories

ATO-68-50-03-F2	High Power, Low PIM 3dB Attenuator with 4.3-10 Female Connectors and wall/pole mount bracket
ATO-68-50-06-F2	High Power, Low PIM 6dB Attenuator with 4.3-10 Female Connectors and wall/pole mount bracket
ATO-68-50-10-F2	High Power, Low PIM 10dB Attenuator with 4.3-10 Female Connectors and wall/pole mount bracket
ATO-68-50-15-F2	High Power, Low PIM 15dB Attenuator with 4.3-10 Female Connectors and wall/pole mount bracket
ATO-68-50-20-F2	High Power, Low PIM 20dB Attenuator with 4.3-10 Female Connectors and wall/pole mount bracket
ATO-68-50-30-F2	High Power, Low PIM 30dB Attenuator with 4.3-10 Female Connectors and wall/pole mount bracket

Standards & Compliance

Safety	EN 60950-1, UL 60950-1
Emission	EN 55022
Immunity	EN 55024
Environmental	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-5, IEC 60068-2-6, IEC-60068-2-11, IEC 60068-2-14, IEC 60068-2-18, IEC 60068-2-27, IEC 60068-2-29, IEC 60068-02-30, IEC 60068-2-52, IEC 60068-2-64, GR-63-CORE 4.3.1, EN 60529 IP20

Certifications

Federal Communication Commission (FCC) Part 15 Class B, CE, CSA US, ISO 9001

