



Phone: (603) 644-2326 ■ Fax: (603) 647-6889
 Email: sales@ionbeammilling.com

Search

- About Us
- Services
- Standard Products
- Custom Products
- By Application
- News

Attenuators

[Home](#) > [Standard Products](#) > [Attenuators](#)

The 01311 attenuator chip series is designed to achieve precision and tight flatness with an attenuation accuracy of ± 0.2 dB on our 1-10 dB pads and ± 0.3 dB on our 11-20 dB pads. Ion Beam Milling tests 100% of all attenuator chips prior to shipment to verify that they meet specifications.

Have Questions?

Receive a quick response!

info@ionbeammilling.com

Fused Silica Dielectric
 Die Size:
 Length = .080"
 Width = .100"
 Thickness = .010"

Tolerance:
 Length & Width +/- .002"
 Thickness +/- .0005"

Metalization

Circuit Side	Back Side
TaN	TiW 800Å
TiW 800Å	Ni 1500Å
Au 120µ" min.	Au 120µ"

Attenuator and Attenuator Pad Details
 Increment Values
 1 dB to 20 dB in 1 dB increments. Higher values are available upon request

Substrate Material
 The standard Attenuator is fabricated on quartz, however alumina and aluminum nitride substrates are also available upon request.

Film Stability
 Less than 0.1% resistance change after 1000 hours at 125°C

Temperature Coefficient of Resistance
 Less than ±100 ppm within the range of -55°C to +150°C

Power Handling Characteristics
 1W CW at 70°C (Three 0.001 Au Wire Bonds, Each Conductor)

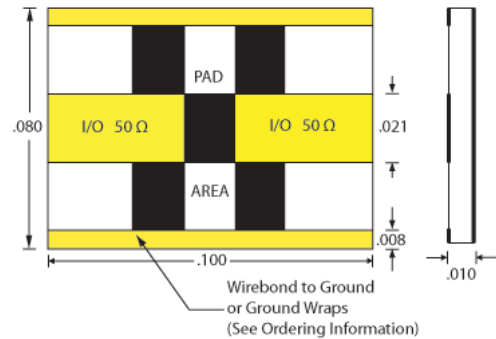
Specifications

VSWR (Max)	Frequency Flatness	Attenuation Accuracy
D.C. to 12.4 GHz, 1.20:1	(0.01 to 18 GHz)	1 to 10dB, 0.2 dB
12.5 to 18.0 GHz, 1.30:1	1 to 10 dB +/- 0.2 dB	11 to 20 dB, 0.3 dB
18.1 to 26.5 GHz, 1.40:1	11 to 20 dB +/- 0.3 dB	

Ordering Information

01311 - XXA ← "A" for Ground Wraps
 Leave blank for Wire Bond Ground

← Attenuation Value 1-20
 (in 1 dB increments)



Au per Mil-G-45204, Type III, Grade A

Part Number	Nominal Attenuation (dB)	Part Number	Nominal Attenuation (dB)
01311-01	1	01311-11	11
01311-02	2	01311-12	12
01311-03	3	01311-13	13
01311-04	4	01311-14	14
01311-05	5	01311-15	15
01311-06	6	01311-16	16
01311-07	7	01311-17	17
01311-08	8	01311-18	18
01311-09	9	01311-19	19
01311-10	10	01311-20	20

© 2014 ION Beam Milling, Inc. All Rights Reserved.
850 East Industrial Park Drive Manchester, NH 03109

[About Us](#) [Services](#) [Standard Products](#) [Custom Products](#) [News](#) [Design Guidelines](#) [Sitemap](#)