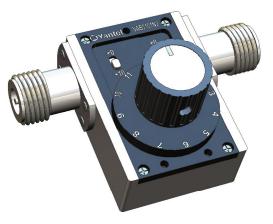


VAB3101N2* Variable Attenuator Patent product

Variable Attenuator VAB Series

- DC to 2.7GHz
- ◆ 0 to 31 dB in 1 dB Step
- ♦ 2 Watt or 5 Watt
- SMA Connectors, N type, BNC available



Features

- Ultra small size with innovative microstrip technology
- Available step value:0~31dB.
- High accuracy
- High performance low cost
- Impedance: 50 or 75 ohm
- Operation repeatability:10000 times each switch
- POM material in rotary switch, operating up to 85°C

Specifications

| Frequency Range | |
|-----------------------|--|
| Attenuation | |
| Step Value | |
| Insertion loss at 0dB | |

DC to 2.7GHz 0 to 31dB 1 dB 0.3dB at 2GHz 0.65dB at 2.7GHz

Attenuation Accuracy (typical)

-0.5 to +1dB from DC to 2.7GHz

| Nominal Impedance | 50 Ohm |
|-----------------------|--------------|
| Average Power | 2 Watt |
| Operating Temperature | -40℃ to +85℃ |

Attenuation 0~31dB

| Freq. Range | VSWR(:1) | | |
|-------------|----------|------|--|
| (GHz) | Тур. | Max. | |
| DC to 2.7 | 1.15 | 1.35 | |

Characteristic

For example the testing curves of VAB3101N2* of 31dB

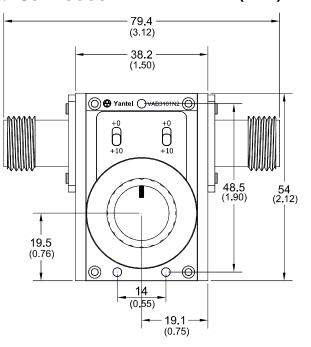
| .00 3 2.0000000 GHz -31.440 dB .01 3 2.0000000 GHz -31.450 dB .02 3 2.000000 GHz -31.577 dB .00 -> -> -> -> .00 -> -> -> -> .00 -> -> -> -> .00 -> -> -> -> .00 -> -> -> -> .00 -> -> -> -> .00 -> -> -> -> .00 -> -> -> -> .00 -> -> -> -> .00 -> -> -> -> .00 -> -> -> -> .00 -> -> -> -> -> .00 -> -> -> -> -> .00 -> -> -> -> -> .00 -> -> -> -> | S21 Log | Mag 1.000dE | / Ref -31.00 | dB [F2] | | | | | System |
|--|----------------|-------------|---|----------------|-------|---------------|-----------|----|---------------------------|
| 0.00 0.00 <t< th=""><th>.00 2 .00 4</th><th>1.0000000</th><th>GHz -31.410 d GHz -31.494 d GHz -31.577 d</th><th>18 18 18</th><th></th><th></th><th></th><th></th><th></th></t<> | .00 2 .00 4 | 1.0000000 | GHz -31.410 d GHz -31.494 d GHz -31.577 d | 18 18 18 | | | | | |
| .00 .01 .02 .02 .03 <td>.00</td> <td>3.0000000</td> <td>GHz -31.587 d</td> <td>В</td> <td></td> <td></td> <td></td> <td></td> <td>Print</td> | .00 | 3.0000000 | GHz -31.587 d | В | | | | | Print |
| .00 .00 .01 .02 .02 .02 .03 .03 .04 <td>.00</td> <td></td> <td></td> <td></td> <td>~~~~</td> <td> ₁₀</td> <td></td> <td></td> <td>Abort Printing</td> | .00 | | | | ~~~~ | ₁₀ | | | Abort Printing |
| .00 .00 <td>.00</td> <td></td> <td>ž</td> <td></td> <td></td> <td>3</td> <td>4</td> <td></td> <td>Printer Setup.</td> | .00 | | ž | | | 3 | 4 | | Printer Setup. |
| S11 SWR 150.0m/ Ref 1.000 [F2] Tr3 522 SWR 150.0m/ Ref 1.000 [F2] Dump 300 1 3.0000000 HHz 1.0015 2.500 1 3.0000000 HHz 1.000 [F2] Dump 301 SWR 150.0m/ Ref 1.000 [F2] 2.500 1 3.0000000 HHz 1.000 [F2] Dump 301 SWR 10.000 [F2] 2.500 1 3.0000000 HHz 1.000 [F2] Dump 301 SWR 10.000 [F2] 2.500 1 3.0000000 HHz 1.000 [F2] Dump 301 SWR 10.000 [F2] 2.500 1 3.0000000 HHz 1.000 [F2] Dump 301 SWR 10.000 [F2] 2.500 1 3.0000000 HHz 1.000 [F2] Multport Test 1.000 300 1 3.000000 [Hz 1.0672 2.050 1 3.0000000 [Hz 1.0472 Multport Test 1.000 500 1 .500 1 .500 1 .000 HE 1.000 [Hz 1.0672 1 .000 500 1 .500 1 .300 1 .000 HE 1.000 [Hz 1.0672 1 .000 600 1 .300 1 .000 1 .000 HE 1.000 HE 1.000 600 1 .450 1 .000 HE 1.000 HE 1.000 HE 1.000 600 1 .000 1 .000 1 .000 HE 1.000 | | | | | | | | | Invert Image ON |
| 3 2.0000000 GHz 1.0410 3 2.000000 GHz 1.0449 Multiport Test : 3 2.000000 GHz 1.0472 2.000 3 2.000000 GHz 1.0472 3 2.000000 GHz 1.0472 3 2.000000 GHz 1.0472 3 2.000000 GHz 1.0472 3 2.00000 GHz 1.0472 3 3.000000 GHz 1.0472 <t< td=""><td>511 SWR</td><td>3.0000000</td><td>1.000 [F2]</td><td></td><td>500 1</td><td>150.0m/ Ref</td><td>12 1.0080</td><td></td><td>Dump Screen Image</td></t<> | 511 SWR | 3.0000000 | 1.000 [F2] | | 500 1 | 150.0m/ Ref | 12 1.0080 | | Dump Screen Image |
| 900 1.900 Misc Setup 750 1.750 Backlight 450 1.400 Nick Setup 300 1.300 Firmware | 200 | 2.0000000 | Hz 1.0410 Hz 1.0702 | | 200 | 2.0000000 G | z 1.0449 | | Multiport Test S Setup |
| 500 1.600 1.450 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0 | 900 | | | | 900 | | | | Misc Setup |
| 300 1.300 Firmware | 600 | | | | 500 | | | | |
| | | | | | | | | | |
| | 150 | | | 1.: | | | | ÷. | |

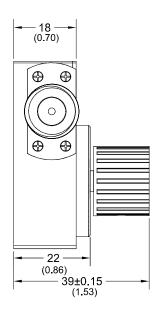


VAB3101N2* Variable Attenuator Patent product

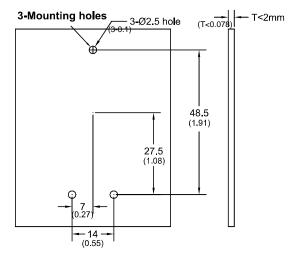
Package Outlines N Connector

Units:mm(inch)





Mounting holes



NOTE:

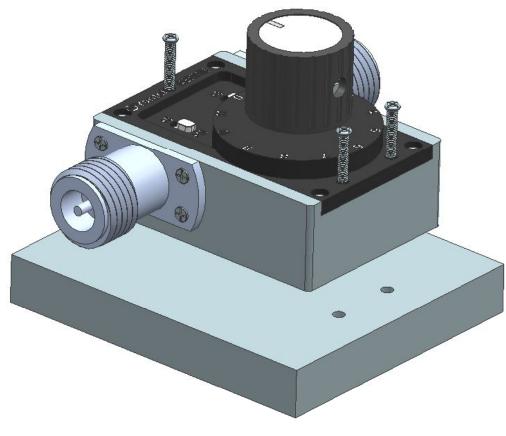
- 1. ALL dimensions shown in mm(tolerance: +/-0.2mm) unless stated otherwise
- 2. RoHS Compliant in accordance with EU Directive(2011/65/EU)



Application case:

Repeater: In deploying the indoor repeater system, Rotary Variable Attenuator is ideal to control the signal and keep each repeater in its specific coverage range.

This VAB series can be rack mountable, easier to operate from the rack outside.



Application