

## NDA-20-18000-31.5-0.5

0.02~18GHz, 31.5dB, 0.5dB

### Features:

- \* Broadband
- \* High Dynamic Range

### Applications:

- \* Wireless
- \* Transmitter
- \* Laboratory Test
- \* Radar

### Electrical

|                       |                                                 |
|-----------------------|-------------------------------------------------|
| Frequency:            | 0.02~18GHz                                      |
| Insertion Loss:       | 5.5dB max.                                      |
| Attenuation Flatness: | ±0.7dB typ. @0.5~16dB<br>±1dB typ. @17.5~31.5dB |
| Step:                 | 0.5dB                                           |
| Attenuation Range:    | 0~31.5dB                                        |
| Attenuation Accuracy: | ±0.8dB typ. @0.5~16dB<br>±1dB typ. @17.5~31.5dB |
| VSWR:                 | 2 max.                                          |
| Voltage/Current:      | -5V @15mA typ.                                  |
| Input Power:          | +25dBm max.                                     |

### Mechanical

|                                              |                                    |
|----------------------------------------------|------------------------------------|
| Size*1:                                      | 32*20*12.7mm<br>1.26*0.787*0.5in   |
| RF Connectors:                               | SMA Female                         |
| Power Supply & Control Interface Connectors: | J30J-15ZKP                         |
| Mounting:                                    | 4-Φ2.7mm through-hole              |
| Logic Input:                                 | On: 1( +3~+5V)<br>Off: 0( 0~+0.5V) |

[1] Exclude connectors.

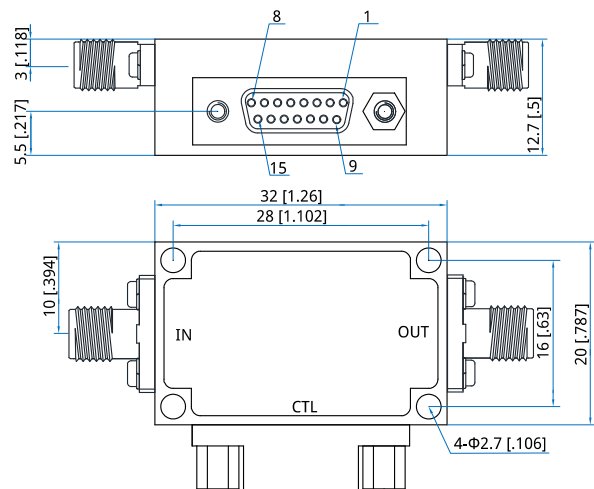
### Pin Numbering

| Pin | Function  | Pin   | Function |
|-----|-----------|-------|----------|
| 1   | -5V       | 7     | C4:-4dB  |
| 2   | GND       | 8     | C5:-8dB  |
| 3   | NC        | 9     | C6:-16dB |
| 4   | C1:-0.5dB | 10    | NC       |
| 5   | C2:-1dB   | 11~15 | NC       |
| 6   | C3:-2dB   |       |          |

### Environmental

|                            |            |
|----------------------------|------------|
| Operating Temperature:     | -45~+85°C  |
| Non-operating Temperature: | -55~+125°C |

### Outline Drawings



Unit: mm [in]

Tolerance: ±0.2mm [±0.008in]

### Logic Table

| State | C1 | C2 | C3 | C4 | C5 | C6 | Attenuation State |
|-------|----|----|----|----|----|----|-------------------|
| -     | 0  | 0  | 0  | 0  | 0  | 0  | Reference IL      |
| 1     | 1  | 0  | 0  | 0  | 0  | 0  | 0.5dB             |
| 2     | 0  | 1  | 0  | 0  | 0  | 0  | 1dB               |
| 3     | 0  | 0  | 1  | 0  | 0  | 0  | 2dB               |
| 4     | 0  | 0  | 0  | 1  | 0  | 0  | 4dB               |
| 5     | 0  | 0  | 0  | 0  | 1  | 0  | 8dB               |
| 6     | 0  | 0  | 0  | 0  | 0  | 1  | 16dB              |
| 7     | 1  | 1  | 1  | 1  | 1  | 1  | 31.5dB            |

### How To Order

**NDA-20-18000-31.5-0.5**

Customization is available upon request.