

Broadband Miniature Attenuators



RLC Electronics' Broadband Miniature Attenuators offer precision impedance matching and bi-directional handling over the extremely broad frequency of DC to 18 GHz. They are also available in the reduced frequency ranges of DC to 12.4 GHz, DC to 8 GHz and DC to 1.5GHz. These miniature microwave structures

are uniquely constructed resistive film elements combined with precision connectors meeting the full requirements of MIL-C-39012. Units can be supplied in standard attenuation values as listed or other values for specific requirements. Three combinations of connectors are available in the standard models.

Specifications

A-1-2-3-4

| Model Number | Frequency Range (GHz) | Attenuation Value (dB) | Accuracy (\pm dB) | VSWR (Max) |
|--------------|-----------------------|------------------------|----------------------|------------|
| A-1 | DC-1.5 | 1 Thru 6 | .3 | 1.20 |
| A-1 | | 7 Thru 20 | .5 | 1.20 |
| A-1 | | 21 Thru 30 | .8 | 1.20 |
| A-8 | DC-8 | 1 Thru 6 | .3 | 1.25 |
| A-8 | | 7 Thru 20 | .5 | 1.25 |
| A-8 | | 21 Thru 30 | .8 | 1.25 |
| A-12 | DC-12.4 | 1 Thru 6 | .3 | 1.35 |
| A-12 | | 7 Thru 20 | .5 | 1.35 |
| A-12 | | 21 Thru 30 | .8 | 1.35 |
| A-18 | DC-18 | 1 Thru 6 | .3 | 1.35 |
| A-18 | | 7 Thru 20 | .5 | 1.35 |
| A-18 | | 21 Thru 30 | 1.0 | 1.35 |

Power Rating: 2 watts avg @ 25° C
Derated linearly to 0.5 watts @ 125° C

Impedance: 50 Ohms

Connectors: SMA male or female, N male or female

Weight: 0.4 oz for SMA, 2 oz for Type N

Material: Stainless Steel

Environment: MIL-A-3933

To designate attenuator desired use:

- (1) 1, 8, 12, 18 for 1.5, 8.0, 12.4 and 18.0 GHz
- (2) 3, 6, etc for attenuation value

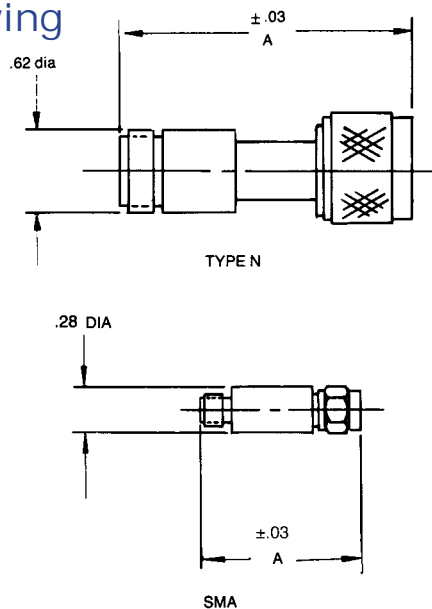
- (3) "R" for SMA, "N" for Type N: Male and Female is standard
- (4) F for 2 female connectors M for 2 male connectors

Example: A-18-20-R is a DC-18 GHz, 20 dB attenuator with SMA male and female connectors

Outline Drawing

| Model No. | A dimension | | | | | |
|-----------------|-------------|------|------|------|------|------|
| | R | RM | RF | N | NM | NF |
| A-1-thru A-12- | .86 | .98 | .92 | 1.77 | 1.70 | 1.86 |
| A-13-thru A-30- | .98 | 1.12 | 1.05 | 1.77 | 1.70 | 1.86 |

Tolerances unless otherwise specified are: .xx \pm .02; .xxx, \pm .005.



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