

# YSRSA10-6-70-1A2

Rotary Step Attenuator, 10 W, DC-6 GHz, 0-100 dB

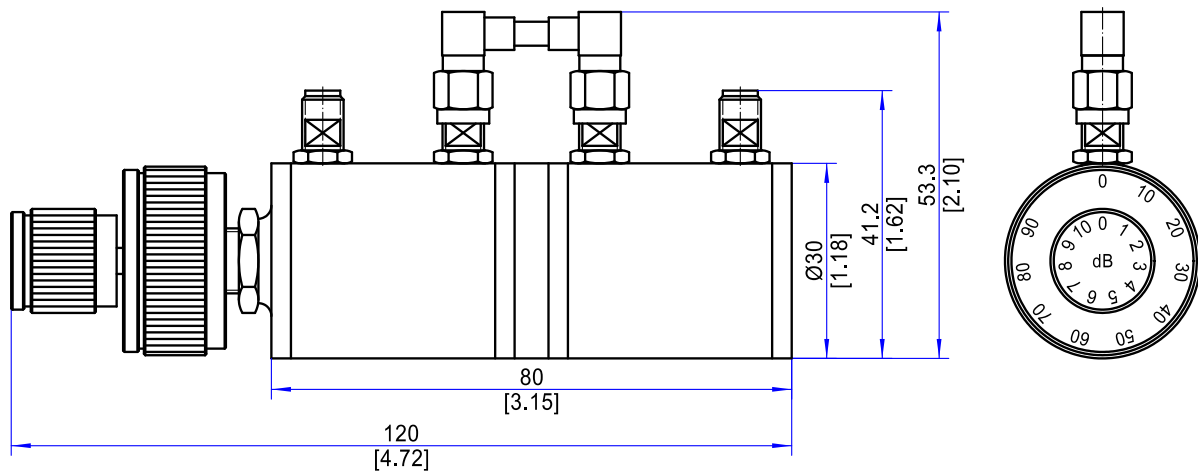
## Key Features

- Broadband Operation (DC-6 GHz)
- High Precision Attenuation Control
- High Power Handling up to 10 W
- Flexible Connector Options
- Rugged & Reliable Mechanical Design

## Applications

- RF & Microwave Test Systems
- Signal Simulation & Calibration
- Receiver Protection
- EMC / EMI Testing
- System Integration & Lab Use

| Electrical Specifications    |   |           |            |      |                          |  |
|------------------------------|---|-----------|------------|------|--------------------------|--|
| Impedance                    | 50 $\Omega$   |           |            |      |                          |  |
| Average Power                | 2 W / 10 W  |           |            |      |                          |  |
| Peak Power                   | 100 W (pulse width: 5 $\mu$ s ,duty cycle: 2%)                        |           |            |      |                          |  |
| Freq. (GHz)                  | Attenuation   |           | VSWR(Max.) |      | Insertion Loss (dB.Max.) | Accuracy(dB)   |
|                              | Range   | Step Size | SMA        | N    |                          |  |
| DC-2.5                       | 0-11 dB   | 0.1 dB    | 1.30       | 1.45 | 1.0                      | $\pm 0.2$ (<1 dB)<br>$\pm 0.4$ ( $\geq 1$ dB)  |
| DC-3                         |   |           | 1.35       | 1.45 | 1.2                      | $\pm 0.3$ (<1 dB)<br>$\pm 0.5$ ( $\geq 1$ dB)  |
| DC-4.3                       |   |           | 1.40       | 1.55 | 1.5                      |  |
| DC-6                         |   |           | 1.55       | 1.60 | 1.8                      |  |
| DC-2.5                       | 0-50 dB   | 1 dB      | 1.30       | 1.35 | 1.0                      | $\pm 0.5$ ( $\leq 10$ dB)<br>$\pm 0.8$ or 3% ( $\leq 50$ dB)                         |
| DC-2.5                       | 0-70 dB   | 1 dB      | 1.30       | 1.45 | 1.0                      | $\pm 0.5$ ( $\leq 10$ dB)<br>$\pm 0.8$ or 3% (<70 dB)<br>$\pm 3.5\%$ (70 dB)         |
| DC-3                         |   |           | 1.35       | 1.45 | 1.2                      |  |
| DC-4.3                       |   |           | 1.40       | 1.55 | 1.5                      |  |
| DC-6                         |   |           | 1.55       | 1.60 | 1.8                      |  |
| DC-2.5                       | 0-100 dB  | 1 dB      | 1.30       | 1.45 | 1.0                      | $\pm 0.5$ ( $\leq 10$ dB)<br>$\pm 0.8$ or 3% (<70 dB)<br>$\pm 3.5\%$ ( $\geq 70$ dB) |
| DC-3                         |   |           | 1.35       | 1.45 | 1.2                      |  |
| Environmental Specifications |   |           |            |      |                          |  |
| Operating Temperature        | -20°C to +85°C  |           |            |      |                          |  |
| Mechanical Specifications    |   |           |            |      |                          |  |
| Connectors                   | SMA Female, N-Type Female   |           |            |      |                          |  |
| Body Material                | Nickel Plated Brass   |           |            |      |                          |  |
| Dimension                    | $\varnothing 30 \times 120$ mm / [ $\varnothing 1.18 \times 4.72$ In] |           |            |      |                          |  |
| Weight                       | Approx. 410 g   |           |            |      |                          |  |

**Outline Drawing** (Units: mm/[inch], Tolerance:  $\pm 0.5$  mm)

**Ordering Information:**

 Model: **YSRSAXX-YY-ZZ-CC**

XX = Power Handling

YY = Frequency Range in GHz

ZZ = Attenuation Range in dB (e.g. 70-1 = 0-70 dB range with 1 dB step size)

CC = Connector Type (S=SMA Female, N=N-Type Female)

 Example: 6 GHz, 2 W, 0-70 dB in 1 dB Steps, SMA-Female → **YSRSA2-6-70-1A2-S**