

OPEN • SHORT • LOAD

Calibration Standard

Type N Female

HAOSL-NJ-18G

DC to 18 GHz • 50 Ω

The HASCO RF Type N Female Open-Short-Load Calibration Standard provides accurate and repeatable calibration for Vector Network Analyzers (VNA) up to 18 GHz. The integrated OSL design combines Open, Short, and Precision Load standards in a rugged, compact assembly ideal for laboratory, production, and field applications.

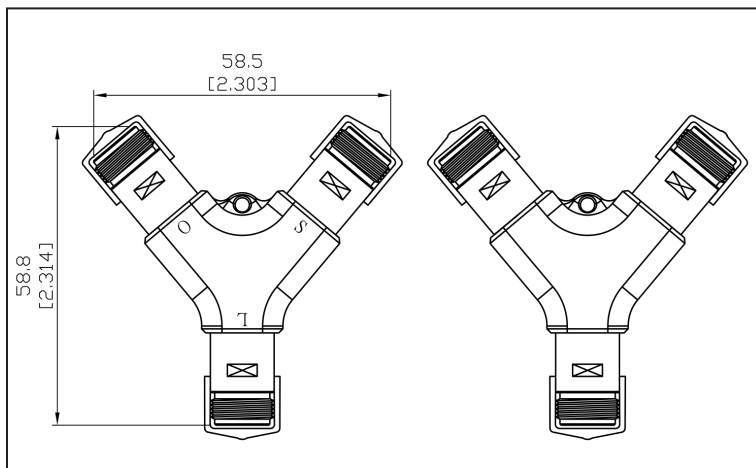
Features

- Integrated Open, Short, Load
- Compact one-piece design
- High return loss performance
- Low phase error
- Rugged Aluminum construction
- Laser engraved port identification
- Includes calibration data

Applications

- VNA Calibration
- RF & Microwave Test Systems
- Production Test / ATE
- Aerospace & Defense
- SATCOM
- Research & Development

Outline Drawing



Calibration & Care

Each calibration standard or calibration kit is supplied with its own fully characterized calibration coefficient datasheet.

- Recommended calibration temperature: 20°C to 25°C
- Keep connector interfaces clean and protected
- Install protective caps when not in use
- Use calibrated torque wrench during mating
- Calibration data provided with each unit



Electrical

- Impedance 50 Ω
- DC Resistance 50 $\pm$ 0.50 Ω
- Max Power 1 Watt
- Frequency Range DC - 18 GHz
- Phase Error (Open/Short) $\leq$ 1.5° (DC - 6 GHz)
 $\leq$ 3° (6 - 18 GHz)
- Return Loss (Open/Short) $\leq$ 0.1 dB (DC - 6 GHz)
 $\leq$ 0.2 dB (6 - 18 GHz)
- Return Loss (Load) $\geq$ 42 dB (DC - 6 GHz)
 $\geq$ 30 dB (6 - 18 GHz)
- Capacitance (Open) -4.0 (1E-15) F
600 (1E-27) F/Hz

Mechanical

- Open/Short Offset Length 42.70 ps

Environmental

- Temperature Range -20°C to 75°C (storage)
- Temperature Range 20°C to 25°C (optimal)
- RoHS Compliant 

Material

- Housing Anodized Aluminum
- Body & Nut Tin-Zinc-Copper alloy plated Brass
- Dielectric PPO
- Contact Gold Plated BeCu
- Cap PVC