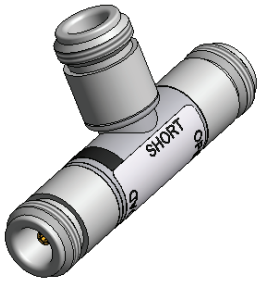
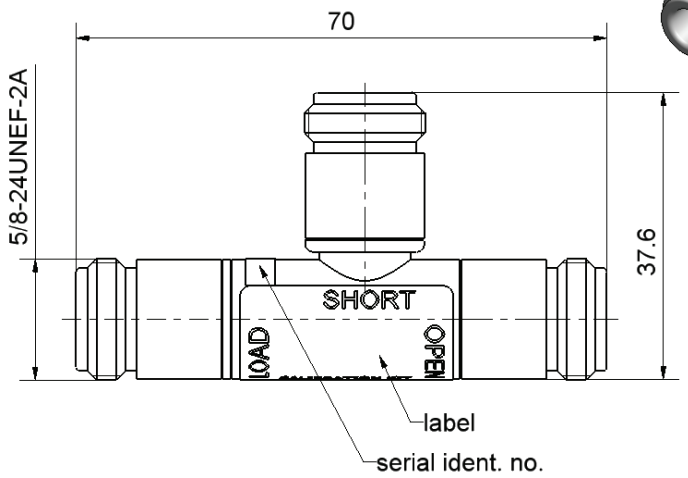
N611
Calibration Kit

COPPER MOUNTAIN
TECHNOLOGIES





All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

According to	IEC 60169-16, MIL-PRF-39012, CECC 22210

Material and Plating

Part	Material	Plating
Center contact	Beryllium copper	Gold, min. 1.27 µm, over nickel
Outer contact	Brass	Flash white bronze over silver
		(e.g. Optargen®)
Body	Brass	Nickel, 2.5-5 µm
Dielectric	PTFE / PPE	
Substrate	Al_2O_3	

Electrical Data

Impedance	50 Ω
Frequency	DC to 6 GHz
Center contact resistance	≤ 1 mΩ
Outer contact resistance	≤ 0.25 mΩ

Open

Return loss	$\|S_{11}\| \leq 0.1$ dB to 6 GHz
Fringing capacitance	$C_0 = -13.0263 \times 10^{-15}$ F
	$C_1 = 125.153 \times 10^{-27}$ F/Hz
	$C_2 = 2947.55 \times 10^{-36}$ F/Hz^2
	$C_3 = -408.224 \times 10^{-45}$ F/Hz^3
Resulting phase uncertainty	$\|\arg(S_{11})\| \leq 3.0°$ to 6 GHz
Offset length	11.2 mm ± 0.05 mm

Short

Return loss	$\|S_{11}\| \leq 0.1$ dB to 6 GHz
Normal phase at short plane	$\varphi = 180°$
Resulting phase uncertainty	$\|\arg(S11)\| \leq 2.0°$ to 6 GHz
Offset length	11.2 mm ± 0.05 mm

Load

Return loss	$\|S_{11}\| \geq 42$ dB to 2.5 GHz
DC-Resistance	R = 50 Ω ± 0.5 Ω
Power handling	P_{max} = 1.0 W (0°C to 50°C)

Mechanical data

Mating cycles	min. 500
Center contact captivation	≥ 28 N
Coupling test torque	max. 1.7 Nm
Recommended torque	0.7 Nm to 1.1 Nm

Environmental data

Temperature range	-40°C to +85°C
2002/95/EC (RoHX)	Compliant

Packing

Standard	1 pce in air cushion bag
Weight	115.2 g/pce