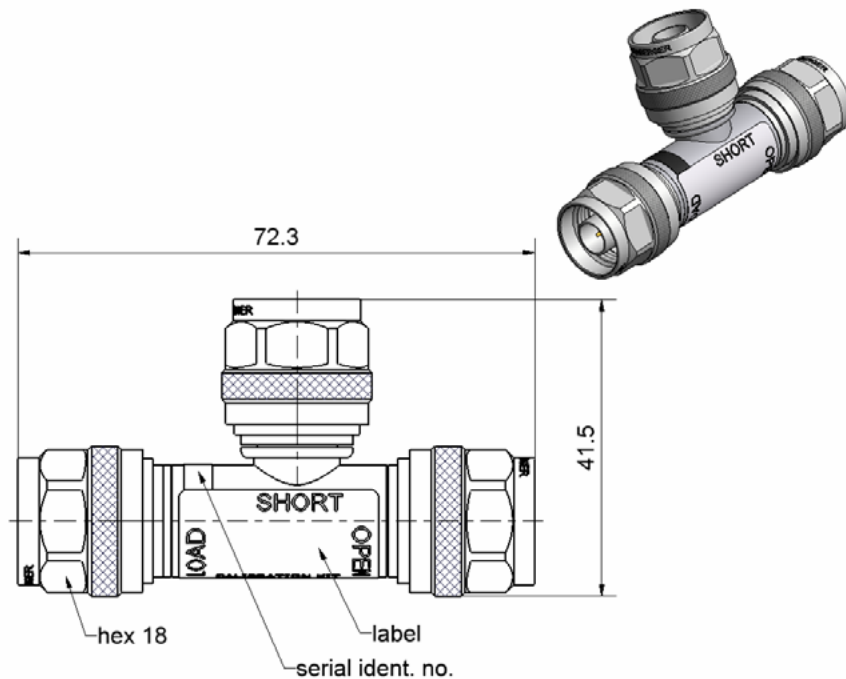


N612 Calibration Kit



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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	Brass	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
Coupling nut	Brass	White bronze (e.g. Optalloy®)
Dielectric	PTFE / PPE	
Substrate	Al_2O_3	

Electrical Data

Impedance	50 Ω
Frequency	DC to 6 GHz
Center contact resistance	$\leq 1 \text{ m}\Omega$
Outer contact resistance	$\leq 0.25 \text{ m}\Omega$

Open

Return loss	$ S_{11} \leq 0.1 \text{ dB to } 6 \text{ GHz}$
Fringing capacitance	$C_0 = 2.68551 \times 10^{-15} \text{ F}$
	$C_1 = 46.1588 \times 10^{-27} \text{ F/Hz}$
	$C_2 = 668.508 \times 10^{-36} \text{ F/Hz}^2$
	$C_3 = -113.007 \times 10^{-45} \text{ F/Hz}^3$
Resulting phase uncertainty	$ \arg(S_{11}) \leq 3.0^\circ \text{ to } 6 \text{ GHz}$
Offset length	$20.32 \text{ mm} \pm 0.05 \text{ mm}$

Short

Return loss	$ S_{11} \leq 0.1 \text{ dB to } 6 \text{ GHz}$
Normal phase at short plane	$\varphi = 180^\circ$
Resulting phase uncertainty	$ \arg(S_{11}) \leq 2.0^\circ \text{ to } 6 \text{ GHz}$
Offset length	$20.32 \text{ mm} \pm 0.05 \text{ mm}$

Load

Return loss	$ S_{11} \geq 42 \text{ dB to } 2.5 \text{ GHz}$
	$ S_{11} \geq 38 \text{ dB, } 2.5 \text{ GHz to } 6 \text{ GHz}$
DC-Resistance	$R = 50 \Omega \pm 0.5 \Omega$
Power handling	$P_{\text{max}} = 1.0 \text{ W (} 0^\circ\text{C to } 50^\circ\text{C)}$

Mechanical data

Mating cycles	min. 500
Coupling nut retention	$\geq 450 \text{ N}$
Center contact captivation	$\geq 28 \text{ N}$
Coupling test torque	max. 1.7 Nm
Recommended torque	0.7 Nm to 1.1 Nm
Gauge	5.33 mm - 5.84 mm

Environmental data

Temperature range	$-40^\circ\text{C to } +85^\circ\text{C}$
2002/95/EC (RoHS)	Compliant

Packing

Standard	1 pce in air cushion bag
Weight	127.1 g/pce



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