

## HL9430 DC Block Capacitor

The HL9430 prevents perturbation of a circuit's DC biasing by low DC input resistance in a resonance-free 50 ohm controlled impedance environment.

### **Applications**

This product is suitable for use with HYPERLABS components such as the HL9402 balun, HL9410 pulse inverter, and HL9420 Series pulse formers.

#### Features and Technical Specifications

Insertion Loss	-1.24 dB at 10 GHz; see Figure 3 for details
Return Loss	-11 dB at 10 GHz; see Figure 4 for details
Risetime	< 17.5 ps
Bandwidth (-3 dB)	16 KHz to 20 GHz
DC Voltage Rating	10 V
Impedance	50 Ω
Time Domain Reflection (35 ps)	150 mRho inductive
SPICE Model	0.468 nH serial inductance
Connectors	SMA, 1 x Plug in, 1 x Jack out
Dimensions	60.4 x 25.3 x 13.8 mm 2.38" x 1.0" x 0.54"
Weight	23.8 g 0.84 oz
Temperature Limits	0° to +40° C, operating -40° to +85° C, storage
Warranty	1 year, repair or return at the sole discretion of

HYPERLABS, Inc.



Figure 1: HL9430 DC Block Capacitor

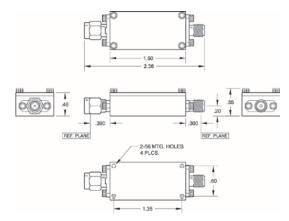


Figure 2: Dimensional drawing of the HL9430

#### **Deployment Notes**

This product is available as either a single unit or as part of an amplitude- and phase-matched pair. Please contact HYPERLABS for pricing and availability.

# HYPERLABS HL9430 Datasheet (page 2)

### HL9430 Frequency Domain Measurements

Figure 3 shows the insertion loss on the RF Output of the HL9430 from 16 KHz to 20 GHz.

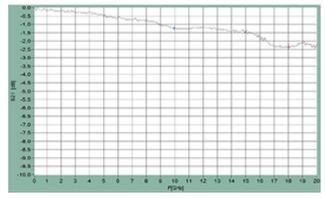


Figure 3: Insertion Loss (S21) on the RF Output of the HL9430

Figure 4 shows the return loss on the RF Input of the HL9430 from 16 KHz to 20 GHz.

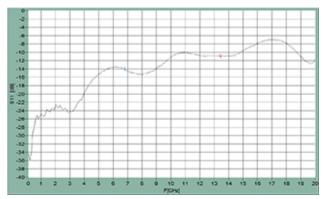


Figure 4: Return Loss (S11) on the RF Input of the HL9430