# HUMBOLDT RF Interconnects

#### **Features & Benefits**

- · Keyed, small form factor, RF multiport
- Custom, cost-effective, quick turn, RF harness
- Cable & board mount options with 2, 4 or 8 ports
- 40+ GHz SMPS interface



Harness the power of the world's fastest squid, the Humboldt, with SV Microwave's latest product offering. The Humboldt RF interconnect platform allows users to design their own harnesses using SV's online drag-and-drop multiport builder guickly and intuitively.

Utilizing an injection-molded housing made of glass-reinforced liquid crystal polymer allows SV to offer configurations with a variety of ports, all implementing the small form factor SMPS blindmate interface.

Applications with multiple RF signal paths remain simple, organized, and protected due to the keying feature inherent in the design.



#### Figure 1 - Left:

Three stacked Humboldt Cable Connectors. All of Humboldt's cable connectors feature thumbscrews for easy installation/removal.

H12C: Humboldt Female Cable Connector, 2 Port H14C: Humboldt Female Cable Connector, 4 Port H18C: Humboldt Female Cable Connector, 8 Port

#### Figure 2 - Right:

An evaluation PCB coupon featuring the 2 port cable connector, H12C, mated to the Edge Launch two port, H12E, connected to SV's solderless Edge Launch 2.92 female connectors.





### **Performance Specifications**



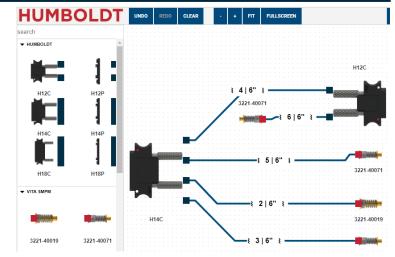
Electrical	
Frequency	40 GHz
VSWR	1.30:1 at 40 GHz
Cross Talk	-85 dB at DC - 20 GHz -75 dB at 20 - 40 GHz

Mechanical			
Insertion Force	1.0 lb nominal per port		
Withdrawal Force	0.8 lb nominal per port		
Min. Mating Cycles	500		
Rec. Mating Torque	12 in-oz		
Max Reflow Temp	260° C		

#### LIMITLESS POSSIBILITES USING THE DRAG-AND-DROP BUILDER

# **Quick and Easy!**

- Shipping in 15 days
- Humboldt, VITA 67 & standard connector options
- Receive instant quotes
- Easily print and share datasheets
- Links to mating PCB connectors on review screen
- Unique part number is easy to re-order
- Download connector datasheets and electrical models directly on SV's website



#### **HUMBOLDT EVALUATION KITS AVAILABLE**



SV Microwave has created a Humboldt Evaluation Kit featuring:

- A two port cable assembly: H12C to 2.92mm Male on 6" of Ø.047 flexible coaxial cable
- PCB evaluation coupon with H12E connected to two 2.92mm female solderless edge connectors via CPW

Contact humboldt@svmicro.com or scan the QR code for more information and evaluate Humboldt's performance quality for yourself.





## **Humboldt Part Number Guide**



Connector TypeC - cableS - surfaceE - edgeP - panel

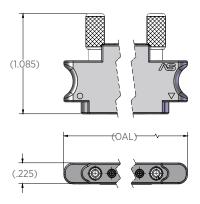


Humboldt Mating Guide (not to scale)						
		Cable Connector 2 Port	MATES TO	H12S	PCB Surface Mount 2 Port	CORC
	H12C			H12E	PCB Edge Mount 2 Port	Torre Co.
				H12P	Panel Mount 2 Port	O Coa Co
00000		Cable Connector 4 Port	MATES TO	H14S	PCB Surface Mount 4 Port	Same C
	H14C			H14E	PCB Edge Mount 4 Port	Conn.
				H14P	Panel Mount 4 Port	Descrit C
C. A. A. S.		Cable Connector 8 Port	MATES TO	H18S	PCB Surface Mount 8 Port	C. Harrison
	H18C			H18E	PCB Edge Mount 8 Port	Tanada is
				H18P	Panel Mount 8 Port	O Tourse To

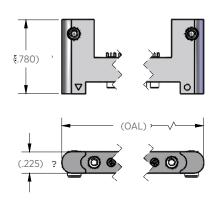


# **Dimensional Overview (inches)**

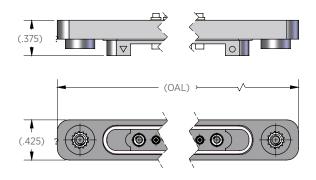




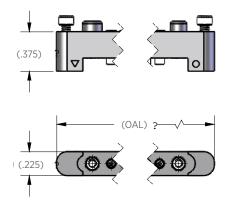
ніхс			
Humboldt P/N	Ports	OAL (in)	
H12C	2	1.170	
H14C	4	1.430	
H18C	8	1.950	



H1XE			
Humboldt P/N	Ports	OAL (in)	
H12E	2	1.170	
H14E	4	1.430	
H18E	8	1.950	



Н1ХР			
Humboldt P/N	Ports	OAL (in)	
H12P	2	2.220	
H14P	4	2.480	
H18P	8	3.000	



H1XS			
Humboldt P/N	Ports	OAL (in)	
H12S	2	1.170	
H14S	4	1.430	
H18S	8	1.950	

