

#### PRODUCT DATASHEET 158EIA-HCA158-C03KT

1-5/8" EIA Connector Kit for 1-5/8" Coaxial Air Dielectric Cable, O-Ring Sealing

RFS Technologies' high-performance air dielectric coaxial cable connectors are designed to ensure a top-quality connector-cable interface, while simplifying and accelerating installation. These connectors, rigorously tested for mechanical and electrical compliance, can be installed quickly and securely with basic hand tools.

The outer contact features a tab flare and integrated O-ring sealing, enhancing both ease of use and durability. Designed for flexibility, the connectors are configured as gas-stop types but can be converted to gas-pass simply by drilling through the insulation.

With a flange interface that meets international EIA and IEC standards, these connectors are built for seamless compatibility. Each C03 series connector is packaged with a flange gasket, coupling element, and necessary hardware—everything required for a reliable and efficient connection. FEATURES / BENEFITS

- **High power rating for enhanced performance**: Built to handle high power levels, these connectors ensure reliable performance and efficient signal transmission, even under demanding conditions.
- Quick, labor-saving installation: Installers can attach these connectors easily with basic hand tools, reducing time and effort on site.
- Adaptable to a variety of applications: Designed as a gas-stop type, each connector can also be converted to gas-pass by drilling, offering flexibility to match specific needs.
- **Broad compatibility across systems**: The flange interface complies with EIA and IEC standards, allowing for seamless integration into different setups.
- **Connector kit convenience**: Each C03 series air cable connector comes with a flange gasket, coupling element, and complete hardware kit for mating with another flange, eliminating the need for additional parts and simplifying ordering and stocking.



Connector 1-5/8" EIA

## **Technical features**

### **GENERAL SPECIFICATIONS**

Transmission Line Type		Coax Cable	
Cable Size		1-5/8	
Cable Type		Air Dielectric	
Model Series		HCA158-50 Series	
Connector Interface		1-5/8" EIA, Swivel Flange	
Connector Type		Gas Stop, can be converted to Gas Pass type by drilling through the insulation	
Sealing Method		O-Ring	
Gender		Female, with coupling element provided	
ELECTRICAL SPECIFICATIONS			
Nominal Impedance, ohms	Ohm	50	
Insertion loss	dB	≤ 0.05dB	
<b>Connector Frequency Range</b>	GHz	DC to 3GHz	
VSWR, Return Loss	VSWR (dB)	DC to 1.0GHz: 1.02 (40) 1.0GHz to 2.0GHz: 1.04 (34) 2.0GHz to 3.0GHz: 1.06 (30.7)	
Peak Power Rating	KW	270	

5 @ DC to 960MHz

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**Average Power Rating** 

www.rfstechnologies.com

KW



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MECHANICAL SPECIFICATIONS			
Plating Outer/Inner		Tri-metal / Silver	
Length	mm (in)	142.4 (5.6)	
Outer Diameter	mm (in)	88.5 (3.5)	
Weight	kg (lb)	1.9 (4.2)	
Body Material		Brass	
Inner Contact Material		Brass/Phosphor Bronze	
Inner Contact Attachment		Tab Flare	
Outer Contact Attachment		Tab Flare	
Gas Inlet		1/8 NPT Female	
TESTING AND ENVIRONMENTAL	_		
Waterproof Level		IP68	
<b>Operation Temperature</b>	°C(°F)	-40 to 85 (-40 to 185)	
(142.4) (142.4) (61.7) (61.7) (61.7) (61.7) (61.7)			

# \*: dimensions in mm

Coupling Element Outline Drawing

#### External Document Links Installation Instruction

88.5

Connector Outline Drawing, dimensions in mm

Notes

These accessories are provided with the connector.

Protection Cap

Coupling Element

Flange O Ring

Flange Screw Kit

Order 158EIA-HCA158-C03RK for the connector reattachment kit.

#### 158EIA-HCA158-C03KT

REV : P2