PRODUCT DATASHEET

412IEC-HCA550-019

4-1/2" IEC/EIA Connector for 5-1/2" Coaxial Cable, Gas stop / Gas pass, O-Ring Sealing

Radio Frequency Systems line of high performance Air Dielectric Cable coaxial cable connectors are characterized by excellent gas tightness and extremely low losses. Air Dielectric CableLite connectors can be installed with basic hand tools, but the use of dedicated installation tools further facilitates ease of assembly and improves performance.
RFS Technologies connectors are fully tested for mechanical and electrical compliance specifications.
Air Dielectric CableLite premium connectors have excellent electrical values and provide outstanding performance for the most demanding applications. The RFS Technologies connector design provides maximum sealing integrity and gas tightness.



Connector 4-1/2" IEC

FEATURES / BENEFITS

- Easy installation utilizing only basic hand tools.
- Tab flare of outer contact attachment means quick and simple installation.
- No need for sealing compound. The connector is ready for pressurization immediately after installed to the cable.
- Excellent gas tightness. Overpressure for increased voltage handling is maintained throughout the system.
- Outstanding VSWR performance improves overall system performance.
- Totally waterproof, assures safe, long term operation in the harshest of environments.
- RoHS (EU) and CRoHS (China) compliant, can be used on a global basis.

Technical features

GENERAL SPECIFICATIONS

Transmission Line Type		Coaxial Cable
Cable Size		5-1/2"
Cable Type		Air Dielectric
Model Series		HCA550-50 Series
Connector Interface		4-1/2" EIA (50 Ω) per IEC 60339-2
Connector Type		Gas stop / Gas pass - See Note 1)
Sealing Method		Silicone rubber
Gender		Female - See Note 2)

ELECTRICAL SPECIFICATIONS

VSWR, Return Loss	VSWR (dB)	DC - 860 MHz: 1.02 (40)

MECHANICAL SPECIFICATIONS

Plating Outer/Inner		silver
Length	mm (in)	254.2 (10.008)
Outer Diameter	mm (in)	212 (8.346)
Weight	kg (lb)	16 (35.274)
Body Material		copper alloy / nickel plated
Inner Contact Material		copper alloy / silver plated

TESTING AND ENVIRONMENTAL

Waterproof Level		IP68
Storage Temperature	°C (°F)	-70 to 85 (-94 to 185)
Operation Temperature	°C(°F)	-40 to 85 (-40 to 185)

All values nominal unless tolerances provided; information contained in the present datasheet is subject to confirmation at time of ordering

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4-1/2" IEC/EIA Connector for 5-1/2" Coaxial Cable, Gas stop / Gas pass, O-Ring Sealing



External Document Links

Installation instructions_hca495-hca618.pdf

Notes

1) The connector is converted to gas pass by drilling through the pilot hole in the insulator.
2) Connector model with -019KT suffix denote connectors that are supplied with an inner connector and flange hardware.
Connector model -019 does not include an inner connector and flange hardware.
Gas inlet: NPT1/8"
Peak power capability: 2250 kW
Average power capability (at 40°C ambient temperature): 37.0 kW @ 860 MHz
Proof voltage, max.:15.0 kV

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