

Extended-K™ Coaxial Connectors

RF Connectors from DC to 43.5 GHz

Mode-Free and Traceable 43.5 GHz Connectors

Extended-K connectors are a series of microwave coaxial cable connectors, sparkplug connectors and 2- and 4-hole flange connectors. These connectors support backhaul requirements for new 5G deployments up to 43.5 GHz, satellite communications, and millimeter-wave (mmWave) body imaging applications.

Extended-K connectors use 2.92 mm connector geometries but have mode-free performance to 43.5 GHz. Modes can be common in connectors because of energy exchanges based on small imperfections on the dielectric bead surface. These modes manifest themselves as attenuation spikes in the connector's frequency response. Extended-K connectors are designed to avoid modes through design and testing before a customer receives them.

Extended-K are the only connectors to 43.5 GHz that feature traceability. While traceability may not be important for all applications, customers that need precise and solid uncertainty budgets can be assured that Extended-K connectors are traceable through a national standards laboratory.

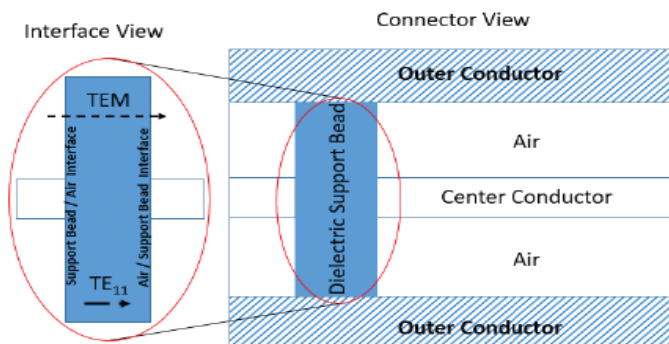


Cost Matters

There are many applications, from 5G to satellite communications, which require frequency coverage up to 43.5 GHz. When choosing a test system, components and connectors, 43.5 GHz can be accomplished with Extended-K connectors over a 50 GHz connector when operation past 43.5 GHz is not warranted. With costs high for re-tooling a test system, Extended-K connectors are the right choice for 43.5 GHz applications.

Extended-K Connector Highlights

- True parameter performance through guaranteed electrical performance
- Reduced migration cost to 2.4 mm connectors when frequency coverage past 43.5 GHz is not warranted
- Superior reliability
- Low VSWR and insertion loss
- Mate compatible with SMA, WSMA, 3.5 mm, and 2.92 mm



Quick Fact Sheet

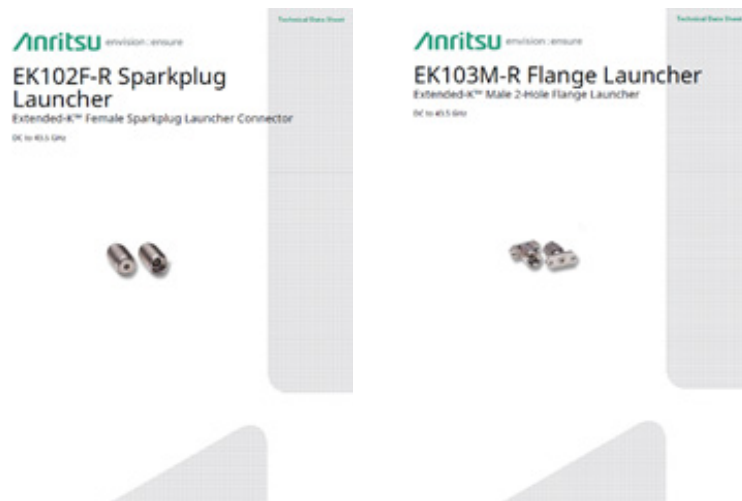
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Key Specifications

Electrical	
VSWR	1.33 max typical to 43.5 GHz
Insertion Loss	0.15 dB max typical to 43.5 GHz
Mechanical	
Mating Cycles	>500
MIL-G-45204C Compliant	Passivated stainless steel with heat-treated beryllium copper center conductors
Environmental	
MIL-STD-202F	Humidity, shock, vibration, and salt spray qualified

For Extended-K Connector Performance, Please Refer to the Relevant Technical Datasheet at www.anritsu.com



Recommended Accessories

EK101X-R Cable Connectors	
01-107M	Cable sleeve soldering fixture for EK101M-R and EK101M-085-R
01-107F	Cable sleeve soldering fixture for EK101F-R
K118	1.5 m length semi-rigid coaxial cable
01-118	Cable assembling fixture kit for K118 semi-rigid coaxial cable
V085	15.2 m length 2.18 mm semi-rigid coaxial cable

EK102X-R Sparkplug Connectors	
01-103	Soldering fixture for sparkplug launcher glass beads
K110-1-R	Microstrip and coplanar waveguide sliding contact
K110-2-R	Stripline sliding contact
K110-3-R	Microstrip and coplanar waveguide sliding contact for 0.38 mm glass feedthrough center conductor

EK103X-R and EK104X-R Connectors	
01-104	Drill and tap set without sliding contacts
01-106	Soldering fixture for flange launcher
01-108	Drill and tap Set with sliding contacts
K110-1-R	Microstrip and coplanar waveguide sliding contact
K110-2-R	Stripline sliding contact
K110-3-R	Microstrip and coplanar waveguide sliding contact for 0.38 mm glass feedthrough center conductor

For more information go to www.anritsu.com