

Selecting an RF Connector

Key considerations in proper selection of an RF connector include:

Frequency - The required frequency of the application defines the available choice of interfaces. See the "Connector Frequency Range" below for specific frequency ranges of various connector interfaces.

Plating - Proper selection is critical to ensure compatibility to the mating component, solderability, intermodulation and durability. See "Selecting a Connector Plating Finish" for additional information on these topics and standard finishes for various connector series.

Power Handling - The ability of the connector interface to handle specified peak and average power ratings is important to prevent overall system failure. Type N and 7-16 connector series are typically specified for medium to high power RF applications. See "Power Handling Considerations" for specified power ratings of various connector series.

Intermodulation - Connectors should be selected which have non-ferrous materials in their construction and plating finish. Stainless steel base materials and nickel finishes should be avoided. 7-16, Type N, SMA.com and ODP.com series have been designed to address such concerns. See "Intermodulation considerations" for further information.

Application Parameters - such factors as packaging density, amount and ease of mating, environmental exposure and shock & vibration are examples of criteria which will determine connector selection. See "Selecting a connector Interface" for additional information.

Connector Frequency Range

Maximum Operating Frequency (GHz)

