Amphenol[®] RF

Global RF Solutions

FEATURES & BENEFITS

Available as AFI-75 for DC-3 GHz 75 Ohm systems and AFI-50 for DC-6 GHz 50 Ohm systems

Proprietary configuration that allows for industry leading misalignment/"float"

Innovative float system of .030" [0,8 mm] radial and .040" [1,0 mm] axial

In-line or Dual-row versions available

APPLICATIONS

Military / Aerospace
Cable Modem Termination Systems (CMTS)
Internet (Routers and Switches)
Telecommunications



AFI Connectors

AFI "Amphenol Floating Interface" Connectors

Amphenol RF introduces the AFI connector interface as a solution for blind mate board-to-board RF applications, especially for the military and broadband marketplaces. The AFI interface utilizes a proprietary configuration that allows for industry leading "float" to compensate for the axial and radial misalignment due to packaging tolerances. This industry-leading float results in a maximum misalignment allowed by the system of .030" [0,8 mm] radial and .040" [1,0 mm] axial. The interface is available in both 75 Ohm and 50 Ohm configurations

AFI - 50 Ohm Specification

Electrical

 $\begin{array}{lll} \text{Impedance} & 50 \ \Omega \\ \text{Frequency Range} & \text{DC to 6 GHz} \\ \text{VSWR (Straight Connectors)} & -25 \text{dB} \ @ 1 \text{GHz} \\ \text{RF leakage} & -70 \ \text{dB} \\ \text{Power Handling} & 95 \ \text{WATTS} \\ \end{array}$

Mechanical

Engagement Force 0.5 - 5 lbs. max
Disengagement Force 0.5 lbs. min
Connector Durability 100 mating cycles

Environmental

Temperature Range -65°C to +165°C

AFI - 75 Ohm Specification

Electrical

 $\begin{array}{lll} \text{Impedance} & 75\Omega \\ \text{Frequency Range} & \text{DC to 3 GHz} \\ \text{VSWR (Straight Connectors)} & -25\text{dB} \textcircled{2} \text{ 1GHz} \\ \text{RF leakage} & -70 \text{ dB} \\ \text{Power Handling} & 95 \text{ Watts} \\ \end{array}$

Mechanical

Engagement Force 0.5 - 5 lbs. max
Disengagement Force 0.5 lbs. min
Connector Durability 100 mating cycles

Environmental

Temperature Range -65°C to +165°C

Need AFI Custom I/O Solutions?

Amphenol RF offers two interconnect solutions for both board to board and I/O applications. The proprietary AFI interface solves packaging design issues with its industry leading float which compensates for mechanical misalignment in stacked PCB's and daughter board/mother board applications. The MCX based solution is utilized for I/O or PCB cabled applications with flexible mounting configurations that solve the toughest packaging design constraints.

Please contact your local sales representative for AFI custom solutions.

