



SMA Self-Fixture End Launch Connectors

Introduction / Applications



An ideal solution for design engineers who are obligated to cut manufacturing costs and complexity out of their circuit board systems.

These enhanced end launch connectors properly align and hold the center contact of a coaxial connector to the circuit board plane without the need for special fixtures. This is done with specially-designed connector legs that tightly grip a range of substrate thicknesses until the soldering operation to couple the two is complete. Additionally, these connectors feature redesigned contacts and insulator material that work in tangent to form an optimized connection point. While the contact maintains proper impedance under aggressive torque and axial stresses, the insulator acts as a seal by compressing itself into the board edge during soldering. This creates a barrier between the inner and outer conductors and protects against solder bridging.

No mounting screws. **No** adapters. **No** more aftermarket tools or ad hoc devices on your assembly lines. These unique connectors will overcome the problematic gaps and discontinuities associated with inconsistent soldering process. These connectors can save your products from the poor connections that degrade signal quality and provide optimal Return Loss values between 0-18 GHz.

For those microwave engineers who are required to transition microwave energy from coaxial to planar transmission line structures on even higher frequency board substrates, Emerson Connectivity Solutions recommends the Johnson line of High Frequency End Launch, Self-Affixing connectors which can operate up to 26.5GHz with good Return Loss values. For more information on these connectors, contact customer service.

The High Frequency End Launch connectors, works in a similar fashion to the self-fixturing connectors by attaching directly to coplanar waveguide circuit board and operates with respectable Return Loss values up to 26.5 GHz. The in-line connector design minimizes reflections as compared to a right-angle (perpendicular) PC mount transition.

Applications for these connectors include:

- Automated Test Equipment
- Broadband MMIC Power Amplifiers
- Cellular Linear Power Amplifiers
- DBS Low-Noise Block Down Convertors
- Global Positioning Satellite Antennas
- GPS and Phased Array Antennas
- High Speed Routers and Switches
- Microwave Filters, Mixers and Combiners
- Phased Array Antennas
- Radar Systems
- Remote Sensing and Metering
- RFID (Radio Frequency Identification) Tags
- Wireless Antennas

