

INTRODUCING

EP-SMA 27GHZ RF CONNECTORS, ADAPTORS AND CABLE ASSEMBLIES

- **Industry leading SMA performance**
- **Economic upgrade solution**
- **Broad portfolio**



TE Connectivity's (TE) EP-SMA 27GHz RF connectors, adaptors and cable assemblies provide low insertion loss, industry leading voltage standing wave ratio (VSWR), and other mechanical and electrical functions to meet the needs of 5G, ATE, bench top, module, wireless devices, and radar in test and measurement, AD&M, and electrical & electronic components industries. With the same footprint as SMA-6GHz, 12GHz, 18GHz solutions, there is typically no need to change the layout of your customer's applications to allow higher frequencies of up to 27GHz or higher electrical SMA performance.

APPLICATIONS

- 5G
- ATE (Automated Test Equipment)
- Bench top
- Module
- Wireless devices
 - Amplifiers, couplers, dividers, mixers, relays, attenuators, fitters, antennas
- Radars (radio detection and ranging)

TARGET MARKETS

- Test & Measurement
- Aerospace and Defense
- Wireless

ELECTRICAL

- Operating Frequency: 27GHz
- Nominal Impedance: 50 ohms
- VSWR (Max.) typically:
 - Adaptors: <1.15
 - Cable assemblies: <1.20
- Insertion loss:
 - Connectors and adaptors: $0.1 * \text{SQRT}(f)$ dB
 - Cable assembly: $\{[1.037 * \text{SQRT}(f) + 0.0039 * f] * \text{length} + 0.2\} / 100 \text{dB}$ Max
- Temperature Rating: -65°C to +165°C

MATERIALS

- Inner contact, BeCu
- Insulator, PTFE
- Outer body, Stainless or Brass

KEY BENEFITS

- **Industry Leading SMA Performance:** EP-SMA 27GHz voltage standing wave ratio (VSWR) and insertion loss performance is superior to previous-generations of SMA-6GHz, 12GHz, and 18GHz. EP-SMA 27GHz adaptors perform at <1.15 VSWR and cable assemblies perform at <1.20 VSWR frequency (as compared to most competitive product's performance of 1.25 VSWR)
- **Economic Upgrade Solution:** Maintains the same footprint as SMA-6GHz, 12GHz, and 18GHz, so there is typically no need to change the layout if customer requires higher frequency to 27GHz or higher electrical SMA performance.
- **Broad Portfolio:** The EP-SMA 27GHz portfolio includes a large breadth of SMA connectors, adaptors, and cable assemblies with frequencies up to 110GHz. Custom configurations available upon request.

STANDARDS & SPECIFICATIONS

- Product Spec: 108-160152

MECHANICAL

- 500 mating cycles per EIA-364-9
- No discontinuities of 0.1 microsecond or longer duration vibration per IEC 61169-1

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