

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

PRODUCT DESCRIPTION

TE Connectivity's (TE) new EP-SMA 27GHz RF connectors, adaptors and cable assemblies provide low insertion loss, supreme 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 applications 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)

BENEFITS

- Industry Leading SMA Performance - EP-SMA 27GHz product portfolio voltage standing wave ratio (VSWR) and insertion loss performance is superior to previous-generations of SMA-6GHz, 12GHz, and 18GHz connectors supporting increasing bandwidths within test and measurement application standards. Our EP-SMA 27GHz adaptors perform at <1.15 VSWR and cable assemblies perform at <1.20 VSWR frequency
- Economic Upgrade Solution - Maintains the same footprint as SMA-6GHz, 12GHz, 18GHz, there is typically no need to change customer's application layout if they require higher frequency to 27GHz or higher electrical SMA performance. Can provide customer applications that are currently using 2.92mm (40GHz) or 3.5mm (33GHz) products performing at 27GHz or lower a cost savings of 50%
- Broad Portfolio - Provide a large breadth of SMA connectors, adaptors, cable assemblies with frequencies up to frequency up to 110GHz (2.92mm, 3.5mm, 2.0mm, 1.85mm, 1.35mm, 1.00mm)
- Custom configurations available upon request

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PRODUCT SPECIFICATIONS

- Operating Frequency: 27GHz
- Nominal Impedance: 50 ohms
- VSWR (Max.) typically:
 - Adaptors: <1.15
 - Cable assemblies: <1.20
- Insertion loss:
 - Connectors and adaptors: $0.1 \cdot \sqrt{f}$ dB
 - Cable assembly: $\{[1.037 \cdot \sqrt{f} + 0.0039 \cdot f] \cdot \text{length} + 0.2\} / 100$ dB Max
- Durability: 500 cycles
- Temperature Rating: -65°C to +165°C
- Meets standard MIL-STD-348B, IEC 60169-15

Connectors Product Offering

Description	Product Type	TE Part Number
EP-SMA, PLUG, 27GHZ, STRAIGHT, 086 CABLE	Connector	2081884-1
EP-SMA, JACK, 27GHZ, STRAIGHT, 086 CABLE	Connector	2081885-1
EP-SMA, PLUG, 27GHZ, STRAIGHT, 141 CABLE	Connector	2081886-1
EP-SMA, JACK, 27GHZ, STRAIGHT, 141 CABLE	Connector	2081887-1
EP-SMA, JACK, 27GHZ, STRAIGHT, 0.23MM PIN	Connector	2081891-1
EP-SMA, PLUG, 27GHZ, STRAIGHT, 0.23MM PIN	Connector	2081892-1
EP-SMA, JACK, 27GHZ, END LAUNCH, 1.5MM BOARD	Connector	2081880-1
EP-SMA, JACK, 27GHZ, END LAUNCH, 1.6MM BOARD	Connector	2081875-1
EP-SMA, JACK, 18GHZ, STRAIGHT, SURFACE MOUNT	Connector	2081897-1



Adapters Product Offering

Description	Product Type	TE Part Number
EP-SMA, ADAPTER, 27GHZ, STRAIGHT, Female To Female	Adapter	2081889-1
EP-SMA, ADAPTER, 27GHZ, STRAIGHT, Male To Male	Adapter	2081890-1
EP-SMA, ADAPTER, 27GHZ, STRAIGHT, F TO M	Adapter	2081888-1



Cable Assembly Product Offering

Description	Product Type	TE Part Number
EP-SMA, ADAPTER, 27GHZ, STRAIGHT, Female To Female	Cable Assembly	2016748-5
EP-SMA, ADAPTER, 27GHZ, STRAIGHT, Male To Male	Cable Assembly	2016750-2
EP-SMA, ADAPTER, 27GHZ, STRAIGHT, Female To Male	Cable Assembly	2016757-9
EP-SMA, 27GHz, RG405 (.086) FLEX, L400, Female To Female	Cable Assembly	2016759-4
EP-SMA, 27GHz, .047" FLEX, L150, STRAIGHT, Male to Male	Cable Assembly	2016753-7



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