

HUBER+SUHNER® SMP3 Offerings Information

Description

- Offering our smallest connector yet – smaller even than SMP and SMPM!
- SMP3 interconnect series offers a blind mate interconnect designed to accommodate both radial and axial misalignment while maintaining performance
- Supports a sub-3 mm Board to Board distance when using the Bullet Adaptor
- MIL-PRF-31031 Qualified Product Offering
- Low interface height ideal for board-to-board interconnects
- On the leading edge of A+D Industry miniaturization trends
- Space-saving design maximizes payload efficiencies
- Push-on capability leads to ease of installation
- Frequency range up to 100 GHz



What is it? The SMP3 connector is 45% smaller than the SMP connection and 30% smaller than SMPM, making it ideal for dense packaging in multiport applications and high-density stacked PCBs. This helps meet and exceed aerospace industry qualification and screening standards while minimizing the spacing between interfaces and allowing for axial and radial misalignment.

SMP3 – Available Connections

Connectors (Other connectors may be made available upon request)

Item Description Part Number(s) SAP ID for Ordering
Female-to-Female Bullet Adaptor 31_SMP3-50-0-1 85164677 and SMP3 Mate / De-mate Tool AT-2377-DCM5 85201028
SMP3 Male Edge Mount 91_SMP3-50-0-FD1 (Full Detent) 85190825 and 91_SMP3-50-0-SB1 (Smooth Bore) 85190826
SMP3 Surface Mount 81_SMP3-S50-0-FD1 (Full Detent, no legs) 85192834 and 81_SMP3-S50-0-FD2 (Full Detent, with legs) 85199271
SMP3 Surface Mount 81_SMP3-S50-0-SB1 (Smooth Bore, no legs), 85199285 and 81_SMP3-S50-0-SB2 (Smooth Bore, with legs) 8519928
SMP3(f) to SMP3(f) on NANO BEND™ Please Refer to Finished Goods Ordering Guide for SMP3 Assemblies, Available Late 2022
SMP3(f) to SK (m) on NANO BEND™ Please Refer to Finished Goods Ordering Guide for SMP3 Assemblies, Available Late 2022

Technical Information

General Information
Impedance – 50 Ω
Frequency Range – DC to 100 GHz
Temperature Range – -55°C to 165°C
Electrical Information
VSWR – 1.20:1 to 26.5 GHz, 1.35:1 to 40 GHz, 1.50 to 65 GHz, 1.70 to 100 GHz
RF Leakage – -80dB (typical mated pair)
Mechanical Information
Axial Misalignment: .010" max Radial Misalignment: +/- .010"
Mating Cycles: Full Detent (FD) – 100 minimum; Smooth Bore (SB) – 500 minimum
Typical Mating Engagement Forces: Full Detent (FD), 11 N or 2.47 lbs. Smooth Bore (SB), 5.3 N or 1.19 lbs.
Typical Mating Disengagement Forces: Full Detent (FD), 20 N or 4.5 lbs. Smooth Bore (SB), 4.45 N or 1.0 lbs.
Environmental Specs
Thermal shock: MIL-STD-202, Method 107, Test Condition B
Corrosion (salt spray): MIL-STD-202, Method 101, Condition B
Vibration: MIL-STD-202, Method 204, Condition D
Shock: MIL-STD-202, Method 213, Condition I