

DSFP Cable Assemblies

10G/25G/50G

Amphenol’s DSFP cable assemblies are designed to support applications for Ethernet and Fibre Channel. The Amphenol DSFP products offer an ultra-high-performance, cost-effective solution for 10G/25G/50G speed applications in switched fabric I/O, switches, routers, data storage arrays, and high-performance computer (HPC) clusters. The Small Form Factor Pluggable (SFP) interface supports a variety of communications standards including Fibre Channel, 10G/25G/50G Ethernet, InfiniBand, and SONET.

- 10G/25G/50G Ethernet, Fibre Channel, InfiniBand & SONET multi- platform support
- Low cross-talk and pair-to-pair with SkewClear® Pair Wire
- Enjoy a reduced power budget and lower port cost compared to optical
- Supports several lengths for both passive and active solutions
- Fully compatible with Amphenol’s SFP+/28/56 board connectors and cages as well as other competitive industry standard connector systems



TARGET MARKETS



FEATURES

- Fully compliant to the latest SFP MSA
- Optimized PCB with auto soldering process
- Stamped EMI Ground Finger
- EEPROM in cable assembly
- Enables 10/25/50 Gb/s per channel transmission
- 32AWG – 26AWG cable sizes
- Passive Direct Attachment Cables (DAC)
- Cable unlatching options either push-to-release or pull-to-release
- RoHS 2 compliant

BENEFITS

- Support to connect any security free SFP port
- Exceeds 10G/25G/50G electrical performance requirement
- Assure 360° EMI shielding effectiveness
- Industry memory map compliance or customized
- Supports industry standards like GbE, FC, etc.
- Supports cable length from 0.25 meter to 4 meter
- Supports 56G up to 4m
- Pull-to-release is great for high density applications
- Environmentally friendly

TECHNICAL INFORMATION

MATERIAL

- Nickel plated Zinc die cast shells & latching mechanism parts
- EM-888k laminated PCB with Gold finger and solder pads
- Differential 2-pair cable with EMI shielding braid and LSZH or PVC jacketing
- Thermoplastic cable pull tab (pull-to-release only)
- Stainless steel EMI finger and other assembly hardware

ELECTRICAL PERFORMANCE

- Differential Impedance: $100\Omega \pm 10\Omega$
- SI performance per 10G/25G/50G Ethernet
- Dielectric Withstanding Voltage per EIA 364-20

MECHANICAL PERFORMANCE

- Durability: 50 cycles
- Mating Force: 18N max.
- Latch Strength Axial Load: 180N min.
- Cable Axial Strain Relief: 90N min.
- Cable Flex: 180° flex; 15 cycles per EIA 364-41

ENVIRONMENTAL

- Thermal Shock: EIA 364-32, Condition 1, 25 cycles, -55°C to $+85^\circ\text{C}$
- Temperature Life: EIA 364-17, Method A, Condition 2, Time Condition C, 500 hours, 70°C

APPROVALS AND CERTIFICATIONS

- Ethernet Alliance Interoperability Compliance
- FCIA Interoperability Compliance
- RoHS 2 Compliant

SPECIFICATIONS

- Refer to the latest revision specification of the SFP small form factor pluggable module
- Applicable IEEE specifications:
 - SFF-8431
 - IEEE802.3by
 - IEEE802.3cd
 - IEEE802.3ck

PACKAGING

- Individually packed in anti-static bags
- Cable ends packaged with dust covers

TARGET MARKETS/APPLICATIONS



Adapter Card
Wireless BBU



Data Center
High Performance Computing (HPC) Router
Server Storage
Switch

PART NUMBERS

Description	Part Numbers	Part Numbers
50G Ethernet Passive DSFP Copper Cable	26AWG Dual Drain LSZH Jacket, 3m	NJFAA1-0003
50G Ethernet Passive DSFP Copper Cable	30AWG Dual Drain LSZH Jacket, 1m	NJFAA3-0001
50G Ethernet Passive DSFP Copper Cable	28AWG Dual Drain Jacketed, 2m	NJFAA7-0002
50G Ethernet Passive DSFP Copper Cable	32AWG Single Drain Jacketed, 1m	NJFFAE-0001
50G Ethernet Passive DSFP Copper Cable	32AWG Single Drain Jacketed, 1.5m	NJFFAE-0006
50G Ethernet Passive DSFP Copper Cable	32AWG Single Drain Jacketed, 0.5m	NJFFAE-0007
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 1m	NJFFAF-0001
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 2m	NJFFAF-0002
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 1.5m	NJFFAF-0006
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 0.5m	NJFFAF-0007
50G Ethernet Passive DSFP Copper Cable	28AWG Single Drain Jacketed, 1m	NJFFAG-0001
50G Ethernet Passive DSFP Copper Cable	28AWG Single Drain Jacketed, 2m	NJFFAG-0002
50G Ethernet Passive DSFP Copper Cable	28AWG Single Drain Jacketed, 2.5m	NJFFAG-0005
50G Ethernet Passive DSFP Copper Cable	28AWG Single Drain Jacketed, 1.5m	NJFFAG-0006
50G Ethernet Passive DSFP Copper Cable	26AWG Single Drain Jacketed, 1m	NJFFAJ-0001
50G Ethernet Passive DSFP Copper Cable	26AWG Single Drain Jacketed, 2m	NJFFAJ-0002
50G Ethernet Passive DSFP Copper Cable	26AWG Single Drain Jacketed, 3m	NJFFAJ-0003
50G Ethernet Passive DSFP Copper Cable	26AWG Single Drain Jacketed, 2.5m	NJFFAJ-0005
50G Ethernet Passive DSFP Copper Cable	26AWG Single Drain Jacketed, 1.5m	NJFFAJ-0006
50G Ethernet Passive DSFP Copper Cable	26AWG Single Drain Jacketed, 3.5m	NJFFAJ-0008
50G Ethernet Passive DSFP Copper Cable	32AWG Single Drain Jacketed, 1m	NJFFBE-0001
50G Ethernet Passive DSFP Copper Cable	32AWG Single Drain Jacketed, 2m	NJFFBE-0002
50G Ethernet Passive DSFP Copper Cable	32AWG Single Drain Jacketed, 2.5m	NJFFBE-0005
50G Ethernet Passive DSFP Copper Cable	32AWG Single Drain Jacketed, 1.5m	NJFFBE-0006
50G Ethernet Passive DSFP Copper Cable	32AWG Single Drain Jacketed, 0.5m	NJFFBE-0007
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 1m	NJFFBF-0001
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 2m	NJFFBF-0002
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 3m	NJFFBF-0003
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 2.5m	NJFFBF-0005
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 1.5m	NJFFBF-0006

PART NUMBERS

Description	Part Numbers	Part Numbers
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 0.5m	NJFFBF-0007
50G Ethernet Passive DSFP Copper Cable	28AWG Single Drain Jacketed, 1m	NJFFBG-0001
50G Ethernet Passive DSFP Copper Cable	28AWG Single Drain Jacketed, 2m	NJFFBG-0002
50G Ethernet Passive DSFP Copper Cable	28AWG Single Drain Jacketed, 3m	NJFFBG-0003
50G Ethernet Passive DSFP Copper Cable	28AWG Single Drain Jacketed, 4m	NJFFBG-0004
50G Ethernet Passive DSFP Copper Cable	28AWG Single Drain Jacketed, 2.5m	NJFFBG-0005
50G Ethernet Passive DSFP Copper Cable	28AWG Single Drain Jacketed, 1.5m	NJFFBG-0006
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 1m	NJFVAF-0001
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 2m	NJFVAF-0002
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 1.5m	NJFVAF-0004
50G Ethernet Passive DSFP Copper Cable	30AWG Single Drain Jacketed, 0.5m	NJFVAF-0007
50G Ethernet Passive DSFP Copper Cable	26AWG Single Drain Jacketed, 2m	NJFVAJ-0002
50G Ethernet Passive DSFP Copper Cable	26AWG Single Drain Jacketed, 3m	NJFVAJ-0003
50G Ethernet Passive DSFP Copper Cable	26AWG Single Drain Jacketed, 5m	NJFVAJ0005
50G Ethernet Passive DSFP Copper Cable	26AWG Single Drain Jacketed, 2.5m	NJFVAJ-0008