

DKT Series

Emerson Network Power Connectivity Solutions offers the Semflex DKT test cable assembly series. This line incorporates high performance cable with equally high performance connectors with cost effective pricing and good performance up to 26 GHz. These assemblies feature low loss triple shielded cable with a standard FEP Teflon® or optional stainless steel inter-linked armor tubing. The triple shielded construction of these cables give outstanding shielding effectiveness of greater than -90dB at 18GHz. These assemblies use precision stainless steel connectors with molded strain relief boots and are designed to meet both MIL-C-39012 and MIL-STD-348a. These cables feature low loss, good VSWR, and are affordably priced.



Key Features & Benefits

- Precision stainless steel connectors
- Low loss PTFE tape Dielectric
- FEP outer jacket; optional stainless steel armored jacketing available
- Triple shielded for >-90 dB leakage at 18GHz

Applications

- Test Equipment
- High temperature (+200° C)
- Low temperature(-65°C)

Available Connectors

- SMA, TNC, N
- Straight and right angle male, straight female

Cable Construction



1. Center conductor: Silver plated copper *
 2. Dielectric: Microporous PTFE tape
 3. Outer conductor: Silver plated copper flat braid*
 4. Shield interlayer: Metalized tape
 5. Braid: Silver plated copper round braid *
 6. Jacket options: Extruded FEP, armor
- * Silver plating per ASTM-B-298

Additional Specifications

Electricals

| | |
|-------------------------|-------------------------|
| Velocity of Propagation | 76.5% |
| RF Leakage Min. @ 18GHz | -90 dB/ft |
| Impedance | 50 Nominal |
| Capacitance | 27 pF/ft 88.58 pF/m |
| Delay | 1.34 ns/ft 4.40 ns/m |
| Breakdown Voltage | >10kV |

Phase Stability vs. Flexure

Mechanical/ Environmental

| | |
|---------------------|-------------------------|
| Nominal Diameter | 0.205 inches .521 cm |
| Minimum Bend Radius | 1.0 inches 2.54 cm |
| Temperature | -65 °C to + 200°C |
| Weight | 0.05 lb./ft .074g/m |

Materials and Finishes Connector

| | |
|-----------|--------------------|
| Body | Stainless Steel |
| Nut | Stainless Steel |
| Gasket | Silicon Rubber |
| Contact | BeCu / Gold plated |
| Insulator | PTFE |

Materials and Finishes Cable

| | |
|------------------|-------------------|
| Cable Jacket | FEP |
| Outer Shield | Silver Copper |
| Inter Shield | Aluminum Polymer |
| Inter Conductor | Silver Copper |
| Dielectric | Micro-porous PTFE |
| Center Conductor | Silver Copper |

DKT CABLE
ATTENUATION vs FREQUENCY



DKT CABLE
CW POWER vs FREQUENCY
Power levels listed in the graph are for sea level and 25°C



DKT Cable Assembly
SMA Male Straight to SMA Male Straight
HP190S Cable

Connectivity Solutions

Whilst due care has been taken to ensure the contents of this data sheet are accurate, Emerson Network Power Connectivity Solutions cannot accept liability for any errors or omissions that may occur. We reserve the right to alter specifications of products without prior notice.

Popular Configurations

| Part Number | Cable Type | Connector 1 | Connector 2 | Length (in) |
|---------------|------------------------|--------------------|-----------------------|-------------|
| 2121-DKF-0012 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Straight | 12 |
| 2121-DKF-0018 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Straight | 18 |
| 2121-DKF-0024 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Straight | 24 |
| 2121-DKF-0036 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Straight | 36 |
| 2121-DKF-0048 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Straight | 48 |
| 2121-DKF-0060 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Straight | 60 |
| 2123-DKF-0012 | HP190S with FEP jacket | SMA Male, Straight | SMA Female, Straight | 12 |
| 2123-DKF-0024 | HP190S with FEP jacket | SMA Male, Straight | SMA Female, Straight | 24 |
| 2123-DKF-0036 | HP190S with FEP jacket | SMA Male, Straight | SMA Female, Straight | 36 |
| 2123-DKF-0048 | HP190S with FEP jacket | SMA Male, Straight | SMA Female, Straight | 48 |
| 2123-DKF-0060 | HP190S with FEP jacket | SMA Male, Straight | SMA Female, Straight | 60 |
| 2122-DKF-0012 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Right Angle | 12 |
| 2122-DKF-0024 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Right Angle | 24 |
| 2122-DKF-0036 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Right Angle | 36 |
| 2122-DKF-0048 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Right Angle | 48 |
| 2122-DKF-0060 | HP190S with FEP jacket | SMA Male, Straight | SMA Male, Right Angle | 60 |
| 2151-DKF-0012 | HP190S with FEP jacket | SMA Male, Straight | N Male, Straight | 12 |
| 2151-DKF-0024 | HP190S with FEP jacket | SMA Male, Straight | N Male, Straight | 24 |
| 2151-DKF-0036 | HP190S with FEP jacket | SMA Male, Straight | N Male, Straight | 36 |
| 2151-DKF-0048 | HP190S with FEP jacket | SMA Male, Straight | N Male, Straight | 48 |
| 5151-DKF-0012 | HP190S with FEP jacket | N Male, Straight | N Male, Straight | 12 |
| 5151-DKF-0018 | HP190S with FEP jacket | N Male, Straight | N Male, Straight | 18 |
| 5151-DKF-0024 | HP190S with FEP jacket | N Male, Straight | N Male, Straight | 24 |
| 5151-DKF-0036 | HP190S with FEP jacket | N Male, Straight | N Male, Straight | 36 |
| 5151-DKF-0048 | HP190S with FEP jacket | N Male, Straight | N Male, Straight | 48 |
| 5152-DKF-0012 | HP190S with FEP jacket | N Male, Straight | N Male, Right Angle | 12 |
| 5152-DKF-0024 | HP190S with FEP jacket | N Male, Straight | N Male, Right Angle | 24 |
| 5152-DKF-0036 | HP190S with FEP jacket | N Male, Straight | N Male, Right Angle | 36 |
| 5152-DKF-0048 | HP190S with FEP jacket | N Male, Straight | N Male, Right Angle | 48 |