

FH280

Flexible, Alternate to semi-rigid cable

Features:
 * Phase Stability
 * Low PIM

Applications:
 * Phased-array Radar
 * Interconnection in and between equipment

Electrical

| | |
|--------------------------|-----------|
| Frequency: | DC~40GHz |
| Cut-off Frequency: | 62GHz |
| Impedance: | 50Ω |
| Velocity of Propagation: | 70% |
| Shielding Effectiveness: | 90dB min. |
| Voltage Withstand: | 500V DC |

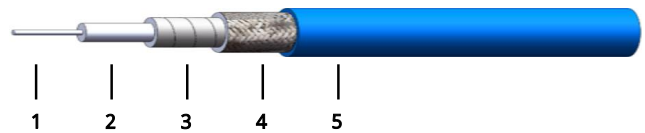
Mechanical

| | |
|-----------------------------|--------|
| Bend Radius (installation): | 13.0mm |
| Bend Radius (repeated): | 26.0mm |
| Weight: | 22g/m |

Environmental

Temperature: -55~+125°C

Construction



| No. | Name | Size (mm) | Material |
|-----|-----------------|-----------|----------------------------|
| 1 | Inner Conductor | 0.53 | Silver-plated copper |
| 2 | Dielectric | 1.63 | PTFE |
| 3 | Inner Shield | 1.83 | Silver-plated copper tape |
| 4 | Outer Shield | 2.18 | Silver-plated copper braid |
| 5 | Jacket | 2.65 | FEP |

Attenuation & Power Handling

| Frequency (GHz) | 0.3 | 0.5 | 1 | 2.4 | 3 | 6 | 8 | 10 | 12.4 | 18 | 26.5 | 40 |
|-------------------------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Attenuation* ¹ (dB/100m) | 37.0 | 48.2 | 69.3 | 110.7 | 125.0 | 183.7 | 216.4 | 246.1 | 279.0 | 348.2 | 440.8 | 570.9 |
| Average Power* ² (W) | 187 | 171 | 119 | 74 | 66 | 45 | 38 | 33 | 30 | 24 | 19 | 14 |

[1] VSWR:1.0; Ambient: +25°C (77°F)

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

Calculate Cable Attenuation: Attenuation (dB/100m) = $2.066929 * \sqrt{F} \text{ (MHz)} + 0.003937 * F \text{ (MHz)}$

Calculate Connector Attenuation: Attenuation (dB) = $0.03 * \sqrt{F} \text{ (GHz)}$

How To Order

FH280-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a FH280 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify FH280-18-SSF-0.5.

Connector naming rules:

2 - 2.4mm (40GHz, VSWR 1.35)

K - 2.92mm (40GHz, VSWR 1.35)

P - SMP (26.5GHz, VSWR 1.3)

A - SSMA (26.5GHz, VSWR 1.3)

S - SMA (26.5GHz, VSWR 1.3)

G - Mini-SMP (mateable with GPPO & SSMP, 18GHz, VSWR 1.3)

N - N (18GHz, VSWR 1.25)

X - MMCX (6GHz, VSWR 1.3)

M - MCX (6GHz, VSWR 1.3)

B - BNC (4GHz, VSWR 1.4)

D - SMB (4GHz, VSWR 1.25)

Female Connector - Add 'F' after connector name

Right Angle - Add 'R' after connector name (VSWR increase 0.1)

Mating Connector

FCG-FB-086-1

SSMP female, Beryllium copper


FCG-FRB-086-2

SSMP female, Right angle, Beryllium copper


FCK-MG-086-3

2.92mm male, Stainless steel


FCK-FB-086-1

2.92mm female, Brass


FCK-FL2G-A220-1

2.92mm female, 2-hole flange mount, Stainless steel

FCK-FL4G-A220-1

2.92mm female, 4-hole flange mount, Stainless steel

FCP-FB-086-3

SMP female, Beryllium copper

FCP-FRB-086-1

SMP female right angle, Beryllium copper


FCP-FRB-086-2

SMP female right angle, Beryllium copper


FCA-MG-086-2

SSMA male, Stainless steel

FCA-FHB-086-1

SSMA female bulk head, Brass

FCS-FL2B-086-1

SMA female, 2-hole flange mount, Brass

FCS-FL4B-086-1

SMA female, 4-hole flange mount, Gold plated beryllium copper

FCS-FHB-086-2

SMA female bulk head, Gold plated brass


FCN-MB-086-1

N male, Nickel plated brass


FCN-FB-086-1

N female, Nickel plated brass


FCX-MB-086-1

MMCX male, Gold plated brass


FCX-MRB-086-1

MMCX male right angle, Gold plated brass


FCX-FB-086-1

MMCX female, Gold plated brass

FCM-MB-086-1

MCX male, Gold plated brass


FCM-MRB-086-2

MCX male right angle, Gold plated brass/beryllium copper

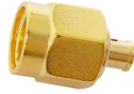

FCM-FB-086-1

MCX female, Gold plated brass

Flexible RF Cables & Assemblies

FCS-MB-086-4

SMA male, Gold plated brass


FCS-MG-086-3

SMA male, Stainless steel


FCS-MRG-086-1

SMA male right angle, Stainless steel


FCS-MRB-086-1

SMA male right angle, Gold plated brass


FCS-FB-086-2

SMA female, Gold plated brass


FC-8-MA-086-1

8-channel connector male, Black anodizing of aluminum


FC-8-FA-086-1

8-channel connector female, Black anodizing of aluminum


FCB-MB-086-1

BNC male, Ternary alloy plated brass


FCD-MB-086-1

SMB male, Gold plated brass

FCD-MRB-086-1

SMB male right angle, Gold plated brass

FCD-FB-086-1

SMB female, Gold plated brass

FCD-FRB-086-1

SMB female right angle, Gold plated brass

FC-8-MK-086-2

8-channel connector male, Chemical Nickel


FC-8-FB-086-1

8-channel connector female, Gold plated brass

