

QH280

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

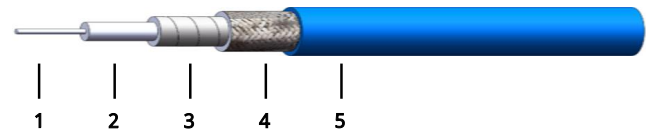
Mechanical

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

QH280-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QH280 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify QH280-18-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

QCK-MG-086-3

2.92mm male, Stainless steel



QCK-FHG-086-1

2.92mm female bulk head, Stainless steel



QCP-MB-086-1

SMP male, Gold plated brass



QCP-FRB-086-1

SMP female right angle, Gold plated brass



QCA-MG-086-1

SSMA male, Stainless steel



QCS-MG-086-3

SMA male, Stainless steel



QCS-MRG-086-1

SMA male right angle, Stainless steel



QCS-MB-086-4

SMA male, Gold plated brass



QCS-MRB-086-1

SMA male right angle, Gold plated brass



QCS-FB-086-2

SMA female, Gold plated brass



QCS-FHB-086-2

SMA female bulk head, Gold plated brass



QCG-FB-086-1

SSMP female, Gold plated brass



QCG-FRB-086-2

SSMP female right angle, Gold plated brass



QCN-MB-086-1

N male, Nickel plated brass



QCN-FB-086-1

N female, Nickel plated brass



QCN-FL4B-086-2

N female, 4-hole flange mount, Nickel plated brass



QCX-MB-086-1

MMCX male, Gold plated brass



QCX-MRB-086-1

MMCX male right angle, Gold plated brass



QCM-MB-086-1

MCX male, Gold plated brass



QCM-MRB-086-2

MCX male right angle, Gold plated brass

