

QH400

Flexible, Alternate to semi-rigid cable

Features:
 * Phase Stability
 * Low PIM

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

Electrical

Frequency:	DC~26.5GHz
Cut-off Frequency:	34GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	1500V DC

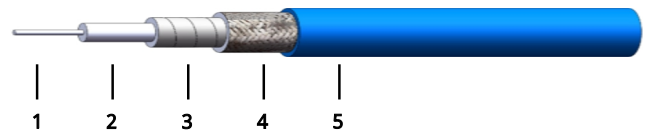
Mechanical

Bend Radius (installation):	20.0mm
Bend Radius (repeated):	40.0mm
Weight:	49g/m

Environmental

Temperature: -55~+125°C

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	0.94	Silver-plated copper
2	Dielectric	3.00	PTFE
3	Inner Shield	3.20	Silver-plated copper tape
4	Outer Shield	3.55	Silver-plated copper braid
5	Jacket	4.00	FEP

Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	2.4	3	6	8	10	12.4	18	26.5
Attenuation*1 (dB/100m)	19.9	26.2	38.2	62.5	71.1	107.5	128.3	147.6	169.4	216.1	280.6
Average Power*2 (W)	512	423	290	177	156	103	86	75	65	51	39

[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) = $1.082677 * \sqrt{F} \text{ (MHz)} + 0.003937 * F \text{ (MHz)}$

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

How To Order

QH400-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QH400 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify QH400-18-SSF-0.5.

Connector naming rules:

3 - 3.5mm (26.5GHz, VSWR 1.3)

P - SMP (26.5GHz, VSWR 1.3)

A - SSMA (26.5GHz, VSWR 1.3)

S - SMA (26.5GHz, 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-141-1

2.92mm male, Stainless steel


QCS-MG-141-3

SMA male, Stainless steel


QCS-MRB-141-4

SMA male, Right angle, Gold plated brass

QCS-MRG-141-3

SMA male, Right angle, Stainless steel

QCS-FB-141-1

SMA female, Gold plated brass


QCS-FL2B-141-1

SMA female, 2 - hole flange mount, Brass

QCS-FL4B-141-1

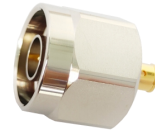
SMA female, 4- hole flange mount, Gold plated brass


QCS-FHB-141-1

SMA female, Bulk head, Brass

QCN-MB-141-3

N male, Nickel plated brass


QCN-MRB-141-1

N male, Right angle, Nickel plated brass


QCN-MRB-141-2

N male, Right angle, Gold plated brass


QCN-FB-141-1

N female, Nickel plated brass


QCB-MB-141-1

BNC male, Ternary alloy plated brass

