

# QD086

## Hand Formable

**Features:**

- \* Hand formable
- \* Quick and easy assembly

**Applications:**

- \* Instrumentation
- \* Laboratory test
- \* Interconnection

**Electrical**

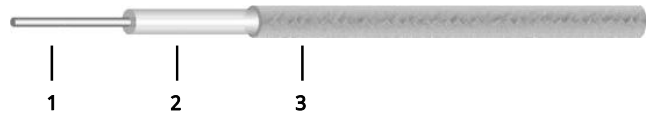
Frequency:	DC~40GHz
Cut-off Frequency:	61GHz
Impedance:	50Ω
Velocity of Propagation:	70%
Shielding Effectiveness:	100dB min.
Voltage Withstand:	1000V DC

**Mechanical**

Bend Radius (installation):	10mm
Bend Radius (repeated):	20mm
Weight:	20g/m

**Environmental**

Temperature:	-55~+150°C
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**Construction**


No.	Name	Size (mm)	Material
1	Inner Conductor	0.53	Silver-plated copper
2	Dielectric	1.65	PTFE
3	Inner Shield	2.17	Tin-plated copper braid

**Attenuation & Power Handling**

Frequency (GHz)	0.1	0.3	0.5	1	2	4	6	12	18	26.5	40
Attenuation*1 (dB/100m, typ.)	21.7	38.2	49.8	71.9	104.6	153.8	193.8	291.6	373.6	476.6	622.6
Average Power*2 (W)	237	135	103	72	49	33	27	18	14	11	8

[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) =  $2.115000 * \sqrt{F} \text{ (MHz)} + 0.004990 * F \text{ (MHz)}$

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

**How To Order**
**QD086-X-Y-Z**

- X: Frequency in GHz
- Y: Connector type
- Z: Length in meters

**Examples:**

To order a QD086 cable assembly, DC-18GHz, SMA male to SMA female, 0.5 meter, specify QD086-18-SSF-0.5.

**Connector naming rules:**

- 2 - 2.4mm (40GHz, VSWR 1.8, typ.)
- K - 2.92mm (40GHz, VSWR 1.8, typ.)
- G - Mini-SMP (mateable with GPPO & SSMP, 40GHz, VSWR 1.8, typ.)
- P - SMP (26.5GHz, VSWR 1.7, typ.)
- A - SSMA (26.5GHz, VSWR 1.7, typ.)
- S - SMA (26.5GHz, VSWR 1.7, typ. / 18GHz, VSWR 1.35 typ.)
- N - N (18GHz, VSWR 1.35, typ.)
- X - MMCX (6GHz, VSWR 1.3, typ.)
- M - MCX (6GHz, VSWR 1.3, typ.)
- B - BNC (4GHz, VSWR 1.4, typ.)
- D - SMB (4GHz, VSWR 1.25, typ.)

Female Connector - Add 'F' after connector name

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