

QT67

Phase & Loss Stable, Long Flex Life

Features:

- * Low Insertion Loss
- * High Phase Stability
- * High Power
- * High Durability

Applications:

- * Laboratory Test
- * Avionics
- * Phased-array Radar
- * Satellite Communication

Electrical

Frequency:	DC-67GHz
Impedance:	50Ω
Velocity of Propagation:	81%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	500V DC
Phase Stability*1:	±7°
Amplitude Stability*1:	±0.05dB

[1] 50mm radius, 360° bending

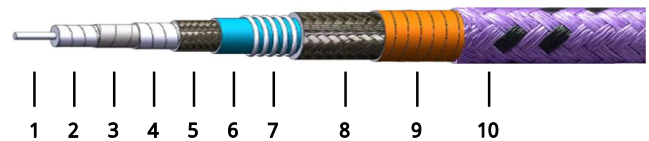
Mechanical

Unarmored Bend Radius (installation/repeated):	12mm/24mm min.
Armored Bend Radius (installation/repeated):	30mm/60mm min.
Bending Life Cycle:	100,000
Mating Life Cycle*2:	5,000

[2] For connectors 1.85mm, 2.4mm, 2.92mm, 3.5mm, SMA only.

Environmental

Temperature: -55~+125°C

Construction


No.	Name	Size (mm)	Material
1	Inner Conductor	0.50	Silver-plated copper
2	Dielectric	1.38	Low density PTFE
3	Inner Shield	1.54	Silver-plated copper tape
4	Interlayer	1.82	Low density PTFE
5	Outer Shield	2.17	Silver-plated copper braid
6	Jacket	2.40	FEP
7-9	Armor (optional)	5.50	Composite
10		6.00	PTFE

Tolerance: ±0.2mm [±0.008in]

Attenuation & Power Handling

Frequency (GHz)	1	2	4	6	8	10	12	18	26.5	33	40	50	67
Attenuation*3 (dB/100m)	64	91	130	161	187	210	232	288	355	400	445	503	594
Average Power*4 (W)	97	68	47	38	33	29	27	21	17	15	14	12	10

[3] VSWR:1.0; Ambient: +25°C (77°F); Raw cable

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

Calculate Cable Attenuation: Attenuation (dB/100m) = 1.975832 * √F (MHz) + 0.001221 * F (MHz)

Calculate Connector Attenuation: Attenuation (dB) = 0.03 * √F (GHz)

How To Order
QT67W-X-Y-Z

W: Armor: P, without armor: blank

X: Frequency In GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QT67 test cable assembly with armor, DC-60GHz, 1.85mm male to 1.85mm female, 0.5 meter, specify QT67P-60-VVF-0.5.

Connector naming rules:

V - 1.85mm (67GHz, VSWR 1.5)

G - Mini-SMP (mateable with GPPO & SSMP, 65GHz, VSWR 1.8)

2 - 2.4mm (50GHz, VSWR 1.4)

K - 2.92mm (40GHz, VSWR 1.35)

A - SSMA (40GHz, VSWR 1.35)

P - SMP (40GHz, VSWR 1.35)

3 - 3.5mm (33GHz, VSWR 1.35)

S - SMA (26.5GHz, VSWR 1.3)

Female Connector - Add 'F' after connector name

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

QT67 Mating Connector

QCV-MG-T67-3

1.85mm male, Stainless steel



QCV-FG-T67-2

1.85mm female, Stainless steel



QT67P Mating Connector

QCV-MG-T67P-4

1.85mm male, Stainless steel



QCV-FG-T67P-2

1.85mm female, Stainless steel

