

QA150

Ultra Low Loss & Phase Stable

Features:

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

Applications:

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

Electrical

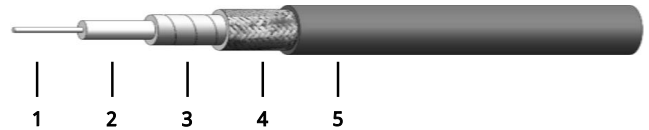
Frequency:	DC~40GHz
Cut-off Frequency:	128GHz
Impedance:	50Ω
Velocity of Propagation:	80%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	400V DC
PIM:	-155dBc
Phase Stability:	1000PPM@-55°C~+85°C max.

Mechanical

Bend Radius (installation):	8mm
Bend Radius (repeated):	15mm
Weight:	5.4g/m

Environmental

Temperature: -55~+125°C

Construction


No.	Name	Size (mm)	Material
1	Inner Conductor	0.30	Silver-plated copper
2	Dielectric	0.88	Low density PTFE
3	Inner Shield	1	Silver-plated copper tape
4	Outer Shield	1.23	Silver-plated copper braid
5	Jacket	1.5	PFA

Attenuation & Power Handling

Frequency (GHz)	1	2	3	6	8	10	12.4	18	26.5	40
Attenuation* ¹ (dB/100m)	113.7	161.6	198.5	282.9	328	368	411.3	499.3	611.5	760.4
Average Power* ² (W)	97	68	56	39	34	30	27	22	18	15

[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) = $3.557846 * \sqrt{F} \text{ (MHz)} + 0.001221 * F \text{ (MHz)}$

 Calculate Connector Attenuation: Attenuation (dB) = $0.03 * \sqrt{F} \text{ (GHz)}$
How To Order
QA150-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a QA150 cable assembly, DC-110GHz, 1.0mm male to 1.0mm female, 0.8 meter, specify QA150-110-11F-0.8.

Connector naming rules:

K - 2.92mm (40GHz, VSWR 1.35)

S - SMA (26.5GHz, VSWR 1.35)

Female Connector - Add 'F' after connector name

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