

VCA-VA800

Ultra Low Loss Phase Stable Coax Cable

Flexible RF Cables & Assemblies

Features:

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

Applications:

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

Electrical

Frequency:	DC~18GHz
Cut-off Frequency:	19GHz
Impedance:	50Ω
Velocity of Propagation:	83%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	3600V DC
PIM:	-155dBc
Phase Stability:	750PPM@-55°C~+85°C max.

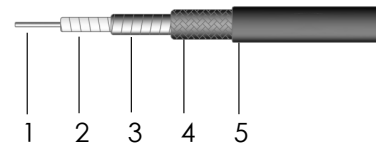
Mechanical

Bend Radius (installation):	35.0mm
Bend Radius (repeated):	80.0mm
Weight:	130g/m

Environmental

Temperature: -55~+165°C

Construction



No.	Name	Size (mm)	Material
1	Center Conductor	2.30	Silver-plated copper
2	Dielectric	6.25	Low density PTFE
3	Outer conductor	6.53	Silver Plated Copper Foil
4	Outer shield	7.15	Silver Plated copper
5	Jacket	7.80	Gray FEP

Attenuation & Power Handling

Frequency (GHz)	0.3	1	2	4	6	8	10	12	14	16	18
Attenuation*1 (dB/100m)	8.0	14.8	21.1	30.2	37.3	43.4	48.9	53.9	58.6	63.0	67.1
Average Power*2 (W)	3341	1812	1269	886	716	615	547	496	456	425	398

[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) = $1.168470 * \sqrt{F \text{ (MHz)}} + 0.000550 * F \text{ (MHz)}$

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

