

VCA-VA360

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~40GHz
Cut-off Frequency:	48GHz
Impedance:	50Ω
Velocity of Propagation:	82%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	900V DC
PIM:	-155dBc
Phase Stability:	750PPM@-55°C~+85°C max.

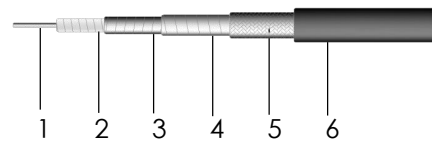
Mechanical

Bend Radius (installation):	18.0mm
Bend Radius (repeated):	36.0mm
Weight:	33g/m

Environmental

Temperature: -55~+165°C

Construction



No.	Name	Size (mm)	Material
1	Center Conductor	0.91	Silver-plated copper
2	Dielectric	2.50	Low density PTFE
3	Outer conductor	2.70	Silver Plated Copper Foil
4	Protective layer	2.75	PET
5	Outer shield	3.16	Silver-plated copper
6	Jacket	3.60	Gray FEP

Attenuation & Power Handling

Frequency (GHz)	0.3	0.5	1	2	4	6	8	10	12	14	18	26.5	40
Attenuation*1 (dB/100m)	20.4	26.4	37.5	53.4	76.1	93.8	108.9	122.3	134.6	146.0	166.7	204.8	255.7
Average Power*2 (W)	940	723	511	359	252	204	176	1570	142	131	115	94	75

[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) = $0.03 * \sqrt{F \text{ (GHz)}}$

