

VCA-SS405

Ultra Low Loss & Phase Stable

R-Test EconoFlex Coaxial Cables

Features:

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

Applications:

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

Electrical

Frequency:	DC~40GHz
Capacitance:	96.1pF/m
Impedance:	50Ω
Velocity of Propagation:	70%
Signal delay:	4.72 ns/m
Insulation resistance:	$\geq 1 \times 10^8$ MΩ/m
Screening effectiveness:	≥ -100 dB
Phase Stability:	≤ 1.9 kVrms.

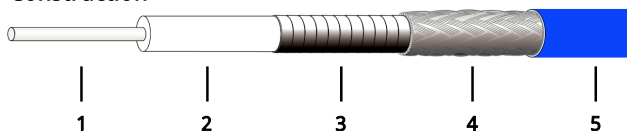
Mechanical

Weight:	21 g/m
Min. bending radius:	6 mm (.236 inch)

Environmental

Temperature:	-55~+200°C
--------------	------------

Construction



No.	Connertor parts	Diameter	Material
1	Inner Conductor		Silver-plated copper
2	Dielectric		PTFE
3	Foil		Copper, Silver plated
4	Braid		Copper, Silver plated
5	Jacket	2.64mm(.104inch)	FEP

Attenuation & Power Handling

Frequency (GHz)	0.5	1	5	10	18	26.5	40
Attenuation* ¹ (dB/m)	0.52	0.75	1.75	2.56	3.56	4.46	5.69
Average Power* ² (W)	198	140	62.6	44.3	33	27.2	22.1

[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) = $0.456300 * \sqrt{F \text{ (MHz)}} + 0.000320 * F \text{ (MHz)}$

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