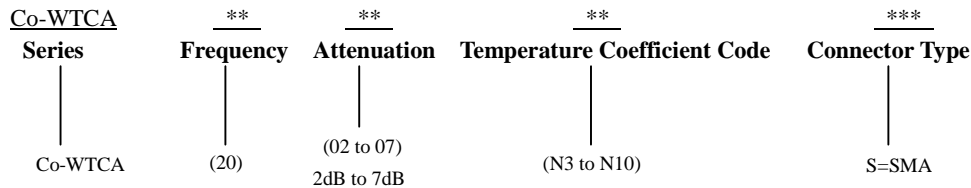


High Frequency Temperature Compensation Attenuator DC~20GHz 50Ω 200Mw 1~7dB N3~N10

**Part No. Descriptions**


Part No.	Frequency Range (GHz)	Attenuation (dB)	Temperature Coefficient Code	Temperature Coefficient of Attenuation (dB/dB/°C)	Max. VSWR (:1) @1GHz@25°C	Max. Input Power (mW)	Attenuation Accuracy (dB)
Co-WTCA2002N*S	DC-20	2	N3~N7	-0.003~ -0.007	1.2	200	±0.5
Co-WTCA2003N*S	DC-20	3	N3~N9	-0.003~ -0.009	1.2	200	±0.5
Co-WTCA2004N*S	DC-20	4	N3~N9	-0.003~ -0.009	1.2	200	±0.5
Co-WTCA2005N*S	DC-20	5	N3~N10	-0.003~ -0.010	1.2	200	±0.5
Co-WTCA2006N*S	DC-20	6	N3~N10	-0.003~ -0.010	1.2	200	±0.5
Co-WTCA2007N*S	DC-20	7	N3~N10	-0.003~ -0.010	1.2	200	±0.5

**General Specifications**

1. Frequency Range DC to 20GHz
2. Attenuation 3dB
3. Attenuation Accuracy at 25°C ±0.5dB@1GHz
4. VSWR at 25°C 1.65:1 Max. over DC-10GHz  
1.40:1 Max. over 10-18GHz  
1.35:1 Max. over 18-20GHz
5. Nominal Impedance 50 Ohms
6. Power Rating 200 mW CW
7. Power Derating 100% @ 125°C  
Derates to 0% @ 150°C
8. Operating Temperature -55°C to +150°C
9. Temperature Coefficient over Operating Temperature Range: See Table Above.  
Temperature Coefficient Tolerance: ±0.001dB/dB/°C.
10. Substrate: Alumina (Al<sub>2</sub>O<sub>3</sub>)
11. Resistive material: Thick film
12. Terminal material: Thick film, Input, Output and Top Ground are gold plated, Back Ground are Pd/Ag.
13. Protective Coating: Thick film (ethyl acetate)
14. Package Outline: See Sheet 2.
15. Workmanship: per MIL-PRF-55342.
16. RoHS Compliant.
17. Electrostatic Discharge Control: per MIL-STD-1686.

**Unit Marking** dB Value (XX), Direction of Shift (N) and TCA Shift (X).

Legibility and Permanency: per MIL-STD-130.

**Quality Assurance**

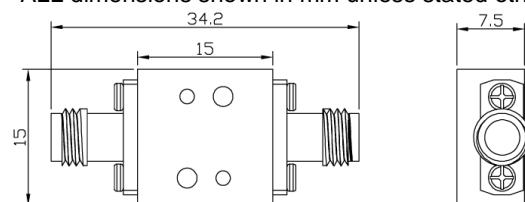
1. Sample inspect per ANSI/ASQC Z1.4 general inspection, LEVEL II, AQL = 1.0.
  - 1.1 Visual and mechanical examination for conformance to outline package requirements.
2. Select five (5) Units from lot measure attenuation from DC to 20GHz every 20°C over the temperature range -55°C to +125°C.
  - 2.1 Calculate, using linear regression, the slope of the curve.
  - 2.2 Calculate TCA using the following formula: TCA = Slope / Attenuation @ 25°C.
3. Test data required for customer.

**Material & Plating**

Parts	Material	Plating(Micro-inch)
Body & Nut	Brass	Gold 30
Contact (female & male)	Beryllium Copper	Gold 30
Insulator	Teflon	

**Package Outlines**

ALL dimensions shown in mm unless stated otherwise

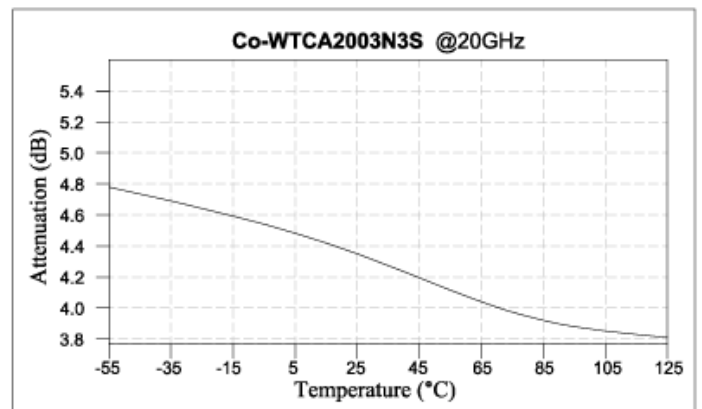
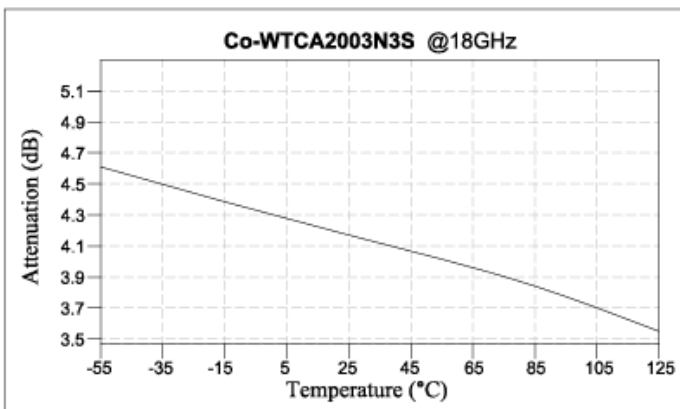
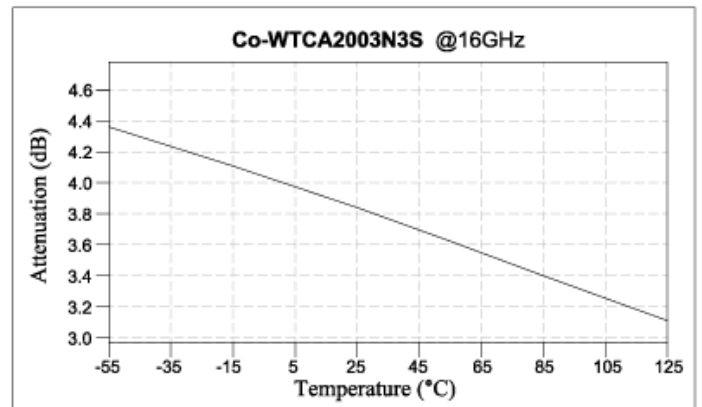
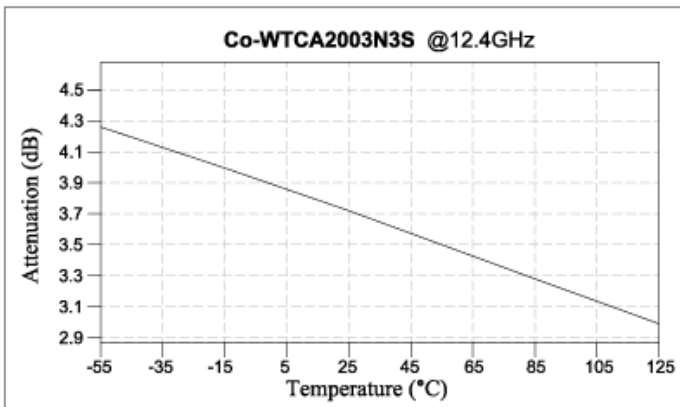
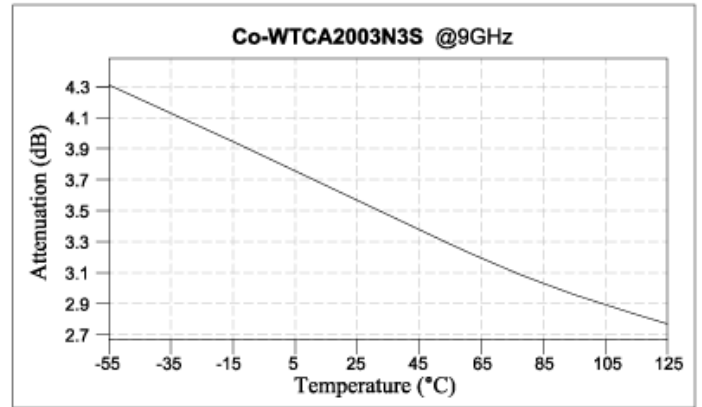
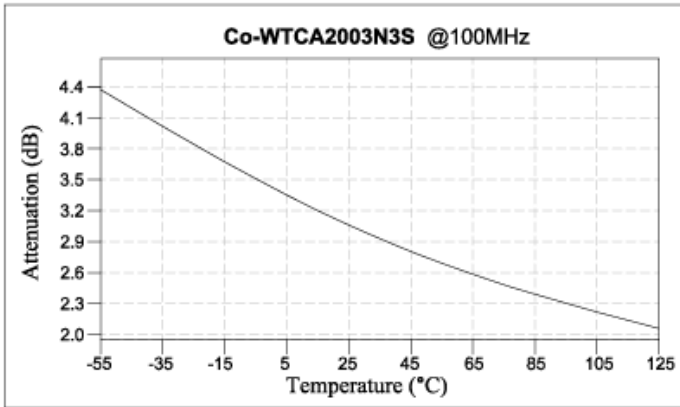

**Yantel Corporation**

Add: 3F, Building 3, Southern District 2 of Zhongguan Honghualing Industrial Park, Xili, Nanshan, Shenzhen, China

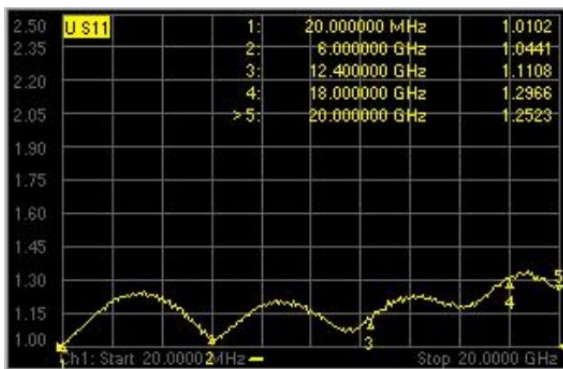
Tel: 86-755-8355-1886 Fax: 86-755-8355-2533

 For detailed performance specs & shopping online see Yantel web site : [www.yantel-corp.com](http://www.yantel-corp.com)

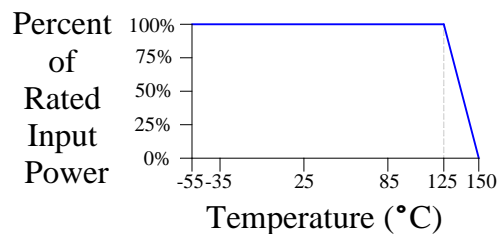
Co-WTCA Response



Typical VSWR @25°C



Power Rating & Derating Curve



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