



Application Note

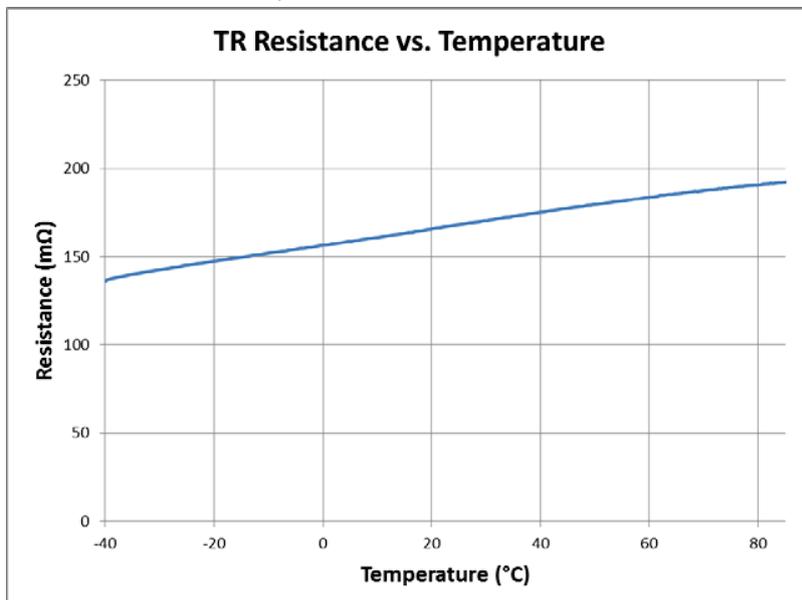
#104 – April 2016

TR Multicoax Series Environmental Performance

Purpose: This application note provides detailed information on how TR Multicoax performs in different environments.

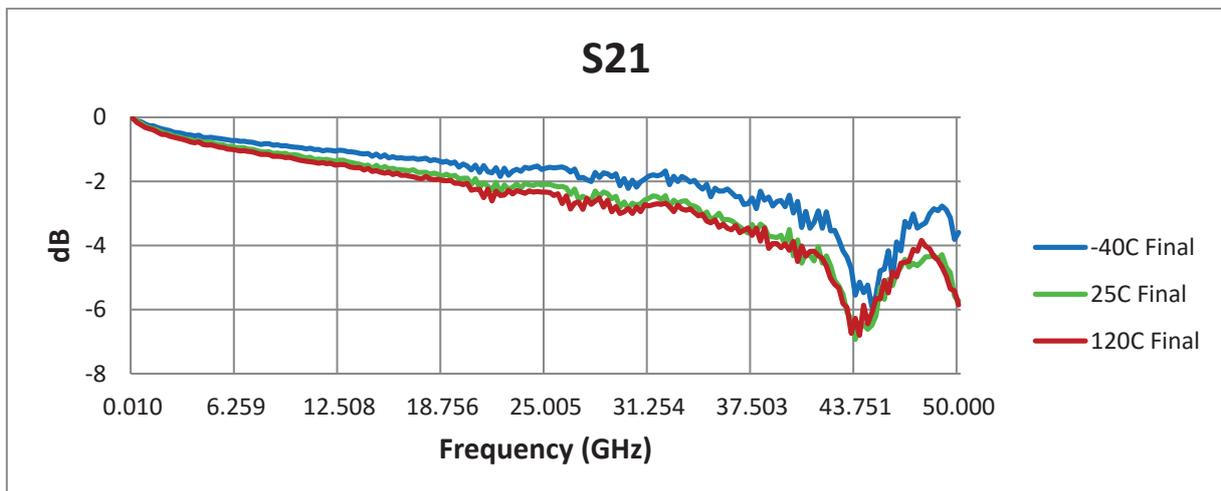
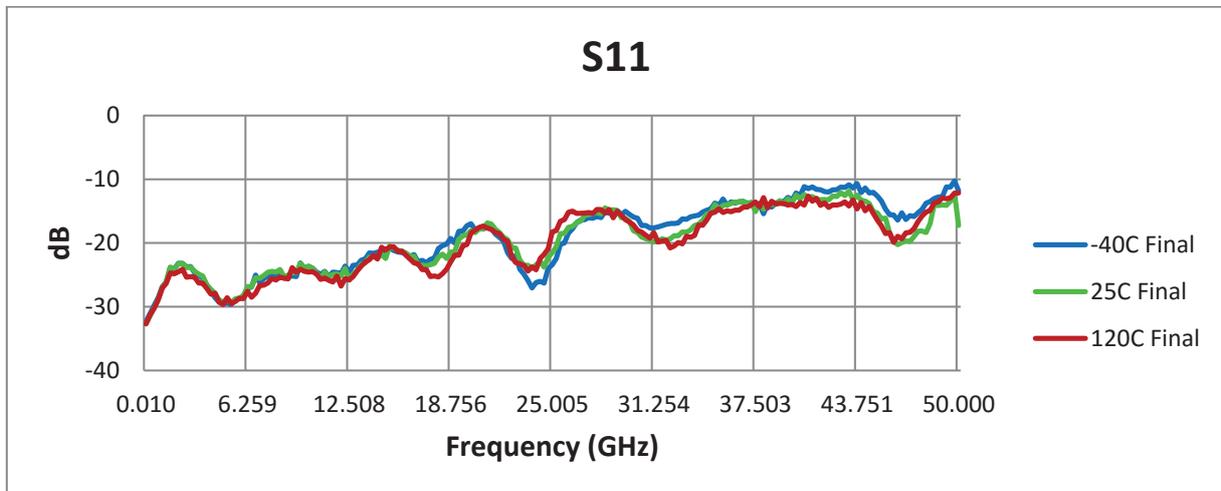
TEMPERATURE RATING

- MIL-STD 810G
- Maximum Temperature before Material Deformation: 125°C



Resistance Tolerance: ± 17 mΩ at (21.1 °C)

EVALUATION KIT TEMPERATURE PERFORMANCE



HUMIDITY and FROST RATING

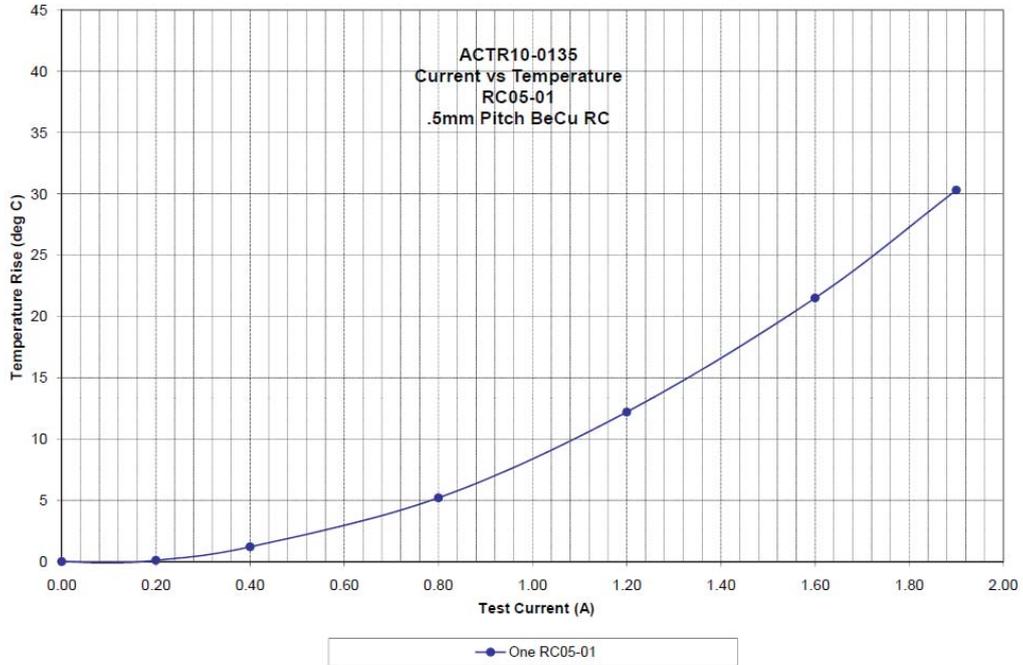
MIL-STD 810G

TENSION PERFORMANCE

As tension is applied to the cable of a TR Assembly the geometry of the cable will change. As the cable stretches the coax center conductor will contract.

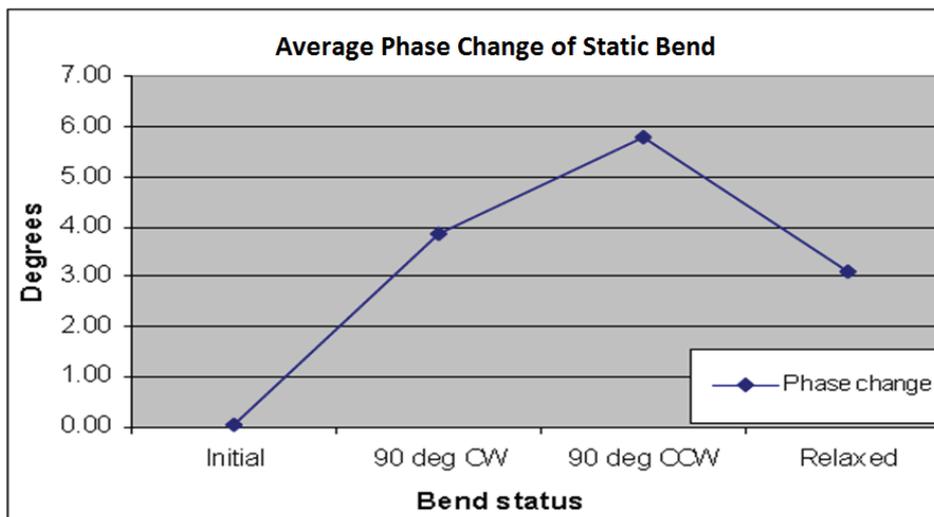
- The maximum pull strength the TR Assembly can handle before at risk of failing electrically is 2.5 lbs of tension static load.
- NOTE: The minimum pull force required for an open varies, the average value is 5.5 lbs.
- NOTE: A static load is defined as not having rotational moment pull forces or variable pull force loads.

CURRENT CAPACITY



BEND RADIUS

Minimum Centerline Bend Radius: .100" / 2.54mm



COAXIAL CABLE SPECIFICATION

The cable used in the TR assemblies is made by Teledyne Storm Microwave and the cable's trade name is Storm Flex 047. Below is a link to the Teledyne website and more information:

http://www.teledynestorm.com/microwave/mw_cablefxgp.asp?div=mw&cg=422-0017

Application Note Summary

- TR Multicoax is designed to meet MIL-STD 810G.
- Maximum temperature before Material Deformation: 125°C.
- Maximum pull strength before at risk of failing electrically is 2.5 lbs of tension static load.
- Minimum pull force required for an open varies, the average value is 5.5 lbs.

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Who is Ardent Concepts

Ardent Concepts, Inc. is a leading designer and manufacturer of high performance multicoax, probes, connectors, sockets used in the development of next generation semiconductors and electronics systems. Our core technology is the smallest, fastest, most electrically efficient compression mount connector technology worldwide. It is used to connect: integrated circuits and printed circuit boards to instrumentation and to each other offering superior signal integrity in a high speed environment. Markets for our products include: Semiconductor, Test & Measurement, Military/Aerospace, Communications and Medical.

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