

7865100 AND 7865200

COAX CONTACTS USING RG316 COAXIAL CABLE

CHARACTERISTICS:

Material (Finish)			
	7865100	7865200	Specification
Center Contact	Au (Gold) over Ni (Nickel)	Au (Gold) over Ni (Nickel)	UNS-C17300 PER ASTM B196/B197 (7865100) UNS-C36000 PER ASTM B16 (7865200) Finish IAW MIL-PRF-39012
Outer Contact			UNS-C17300 PER ASTM B196/B197 (7865100) UNS-C36000 PER ASTM B16 (7865200) Finish IAW MIL-PRF-39012
Dielectric	PTFE	PTFE	MIL-P-19468
Crimp Ring	Brass 360 (Nickel)	Brass 360 (Nickel)	UNS-C36000 PER ASTM B16 Finish IAW AMS-QQ-N-290
Retaining Clip	BeCu (Nickel)	BeCu (Nickel)	UNS-C17200 PER ASTM B196/197 Finish IAW AMS-QQ-N-290
Electrical			
Impedance	50 Ohm	50 Ohm	-
Frequency range	DC - 3Ghz	DC - 3Ghz	MIL-PRF-39012
Dielectric Withstanding Voltage (DWV)	800 VDC Min	800 VDC Min	MIL-STD-202-301
Vibrations	< .1μs	< .1μs	MIL-STD-202-201
RF Leakage	>80dB	>80dB	MIL-PRF-39012
Contact Resistance	< 5mOhm	<5 mOhm	MIL-PRF-39012
Mechanical			
Cycle life	10,000	10,000	MIL-PRF-39012
Mating Force (Insertion/Withdrawal)	14.4 oz / 14.40 oz	14.4 oz / 14.40 oz	MIL-PRF-39012
Salt Atmosphere	-	-	MIL-STD 202-101
Moisture Resistance	-	-	MIL-STD-202-106
Thermal Shock	-	-	MIL-STD 202-107
Storage Temperature	-40 to 125 °C	-40 to 125 °C	MIL-STD-810
Operating Temperature	-40 to 100 °C	-40 to 100 °C	MIL-STD-810

S-PARAMETER TEST METHOD

MATERIALS:

- RG316 COAXIAL CABLE
- SMA MALE CONNECTOR (AMPHENOL P/N: 901-9511-3)
- MICRO-COAX, CONTACT, FEMALE [RECEIVER] (MAC PANEL P/N: 7865100)
- MICRO-COAX, CONTACT, MALE [ITA] (MAC PANEL P/N: 7865200)

TEST SETUP:

- PATCH CORDS FOR 12", 36", AND 72" LENGTHS WERE CREATED WITH SMA CONNECTORS ON ONE END AND MAC PANEL CONTACTS ON THE OTHER.
- TEST DATA TAKEN USING A VNA WHOSE PORTS WERE CALIBRATED AT THE SMA REFERENCE PLANE. CALIBRATION METHOD CONSISTED OF A 2 PORT SOLT CALIBRATION WITH 12 TERM ERROR CORRECTION. ADDITIONAL INFORMATION MAY BE PROVIDED BY MAC PANEL ENGINEERING UPON REQUEST.
- PATCH CORD NUMBERS (GENERATED USING EASY CABLE UTILITY) SHOWN BELOW:

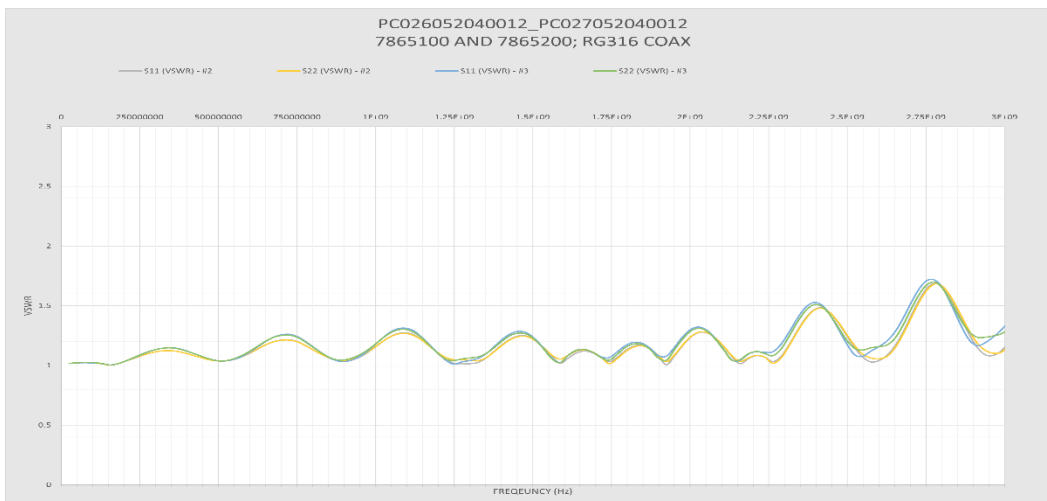
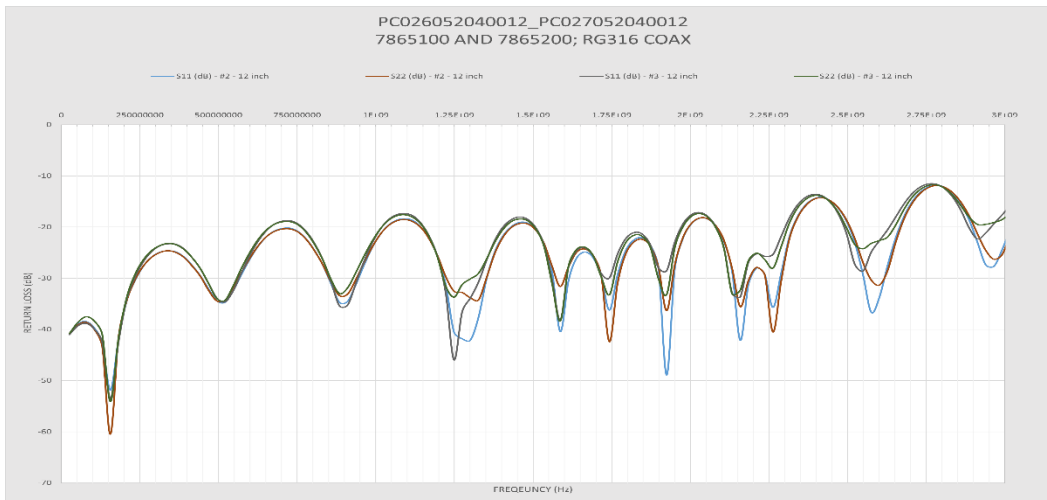
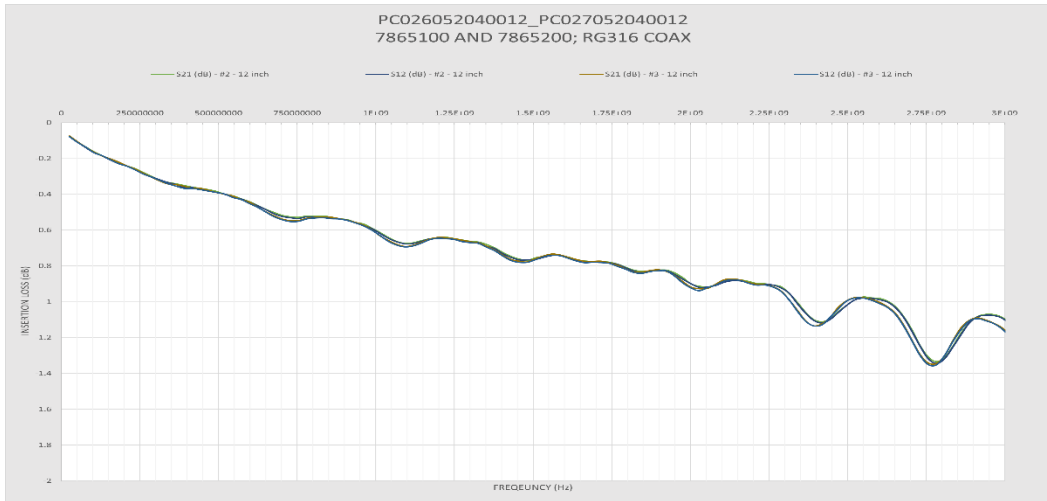
CONTACT	CABLE	PATCH CORD1	LENGTH1	QTY1		PATCH CORD2	LENGTH2	QTY2		PATCH CORD3	LENGTH3	QTY3
7865100	RG316	PC 026 052 040 012	12"	3		PC 026 052 040 036	36"	3		PC 026 052 040 072	72"	3
7865200	RG316	PC 027 052 040 012	12"	3		PC 027 052 040 036	36"	3		PC 027 052 040 072	72"	3



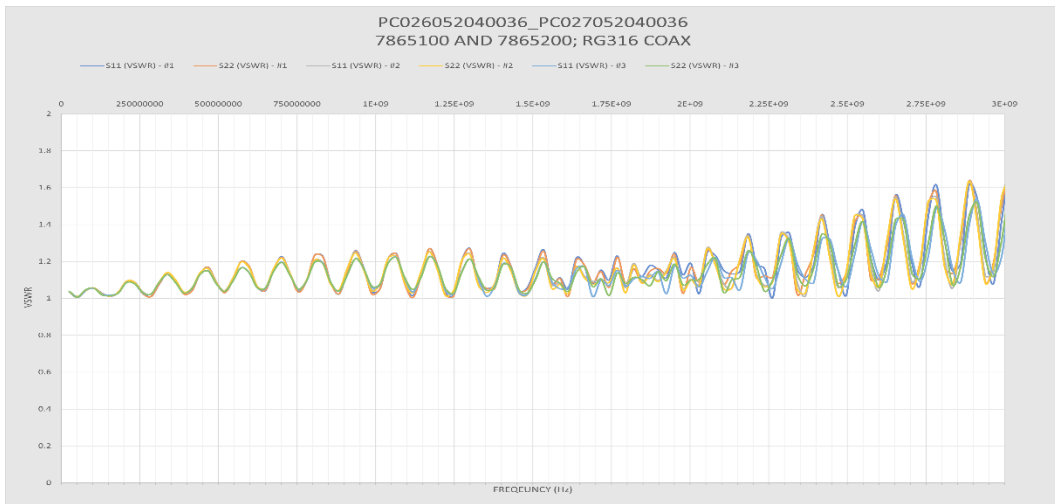
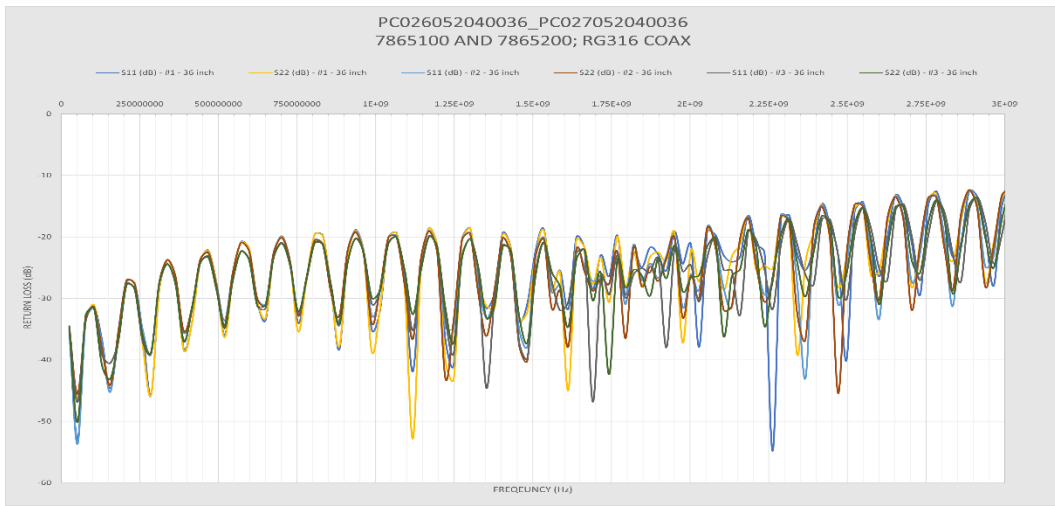
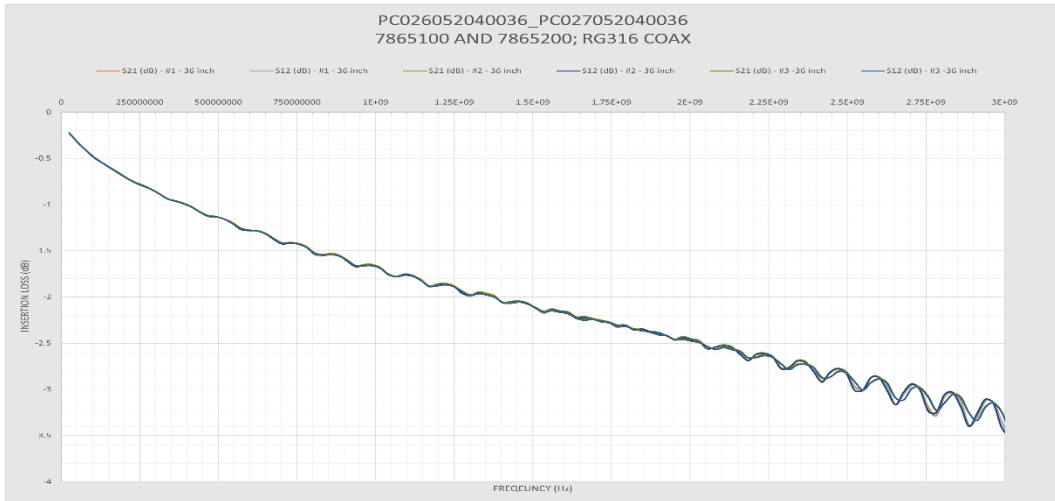
- DATA IS REPRESENTATIVE OF THE CUMULATIVE CONTRIBUTION OF TWICE THE CABLE LENGTH STATED, 2 SMA CABLE ADAPTERS, AND A MATED PAIR OF MAC PANEL CONTACTS.

RESULTS:

12 INCH CABLE ASSEMBLIES



36 INCH CABLE ASSEMBLIES



72 INCH CABLE ASSEMBLIES

