



Description

- IPEX MHF1 to SMA (F) Bulkhead Straight Connector
- 100mm length, 1.37mm Outside Diameter coaxial cable

Contents

1. Features	2
2. General data	2
3. Cable Insertion Loss	5
4. Part number	6
6. Hazardous Material Regulation Conformance	8

1. Features

High reliability connectors
 Low loss cable
 Low insertion loss RF connectors

2. General data

2.1. SMA Jack Straight Connector

ELECTRICAL	
Impedance	50Ω
Frequency Range	DC ~ 6GHz
Working Voltage	Max ≤ 335Vrms
Dielectric Withstanding Voltage	1000 Vrms
Insulation Resistance	≥ 1000MΩ
Center Contact Resistance	≤ 10mΩ
Outer Contact Resistance	≤ 5mΩ
VSWR	≤ 1.20 @3GHz
Durability	> 500 cycles
Temperature range	-55°C to +155°C

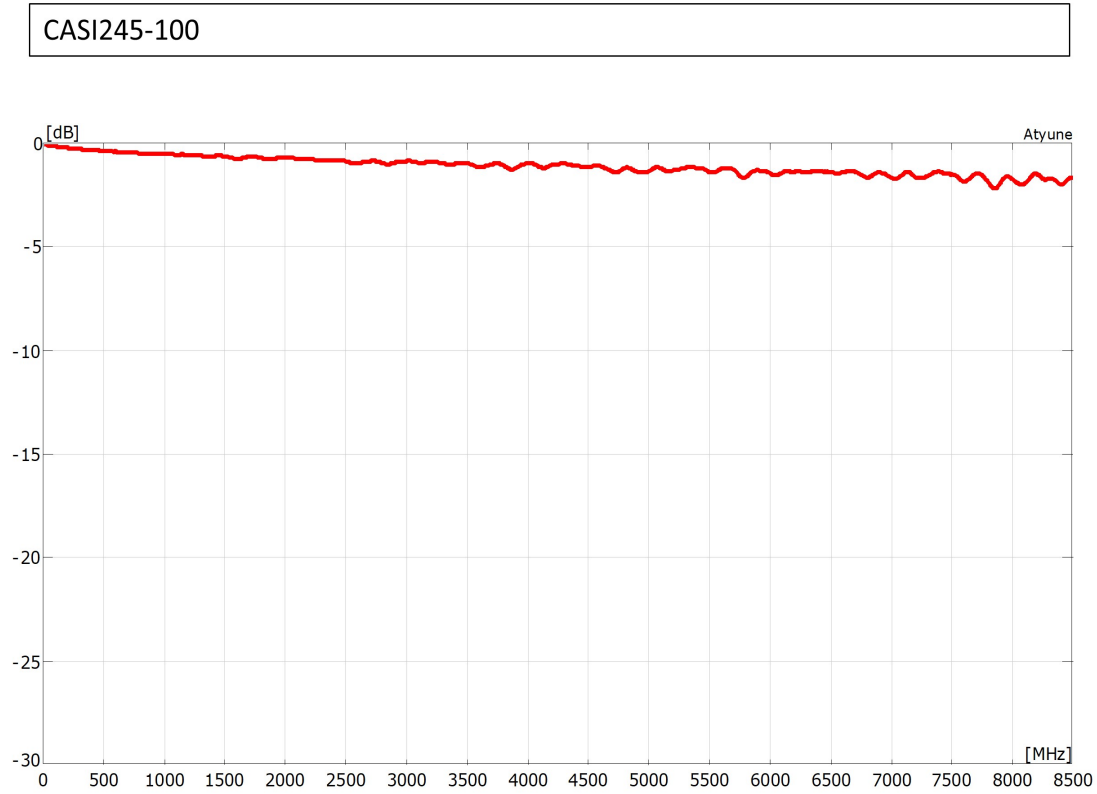
2.2. IPEX MHF 1 Connectors

IPEX part number – 21351-112R-37	
Impedance	50Ω
Frequency Range	DC ~ 6GHz
Rate Voltage	AC 60V
Withstanding Voltage	AC 200V/minute
Insulation Resistance	$\geq 500\text{M}\Omega/\text{DC}100\text{V}$
Contact Resistance	$\leq 20\text{m}\Omega$
Temperature	-40°C to +90°C
VSWR	≤ 1.50
Durability	30 cycles

2.3. Cable Specification

ELECTEICAL Characteristics	
Cable Item	30 AWG O.D 1.37 Black
Capacitance (pF/m)	96
Impedance (ohm)	50
Velocity (%)	70
Min. Bend Radius (mm)	4
Max. Oper. Voltage (Vrms)	1000
Max. Oper. Frequency (MHz)	6000
Operating Temperature	-55°C to +200°C
VSWR	1.50
Attenuation (dB/100m)	1000 MHz - 160dB/100m 2000 MHz - 230dB/100m 3000 MHz - 290dB/100m 4000 MHz - 340dB/100m 5000 MHz - 400dB/100m 6000 MHz - 430dB/100m
Cable length	100mm

3. Cable Insertion Loss

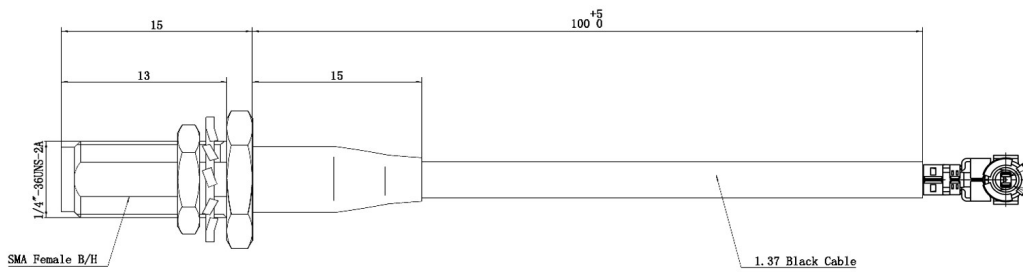


4. Part number and Description

Part Number – CASI245-100

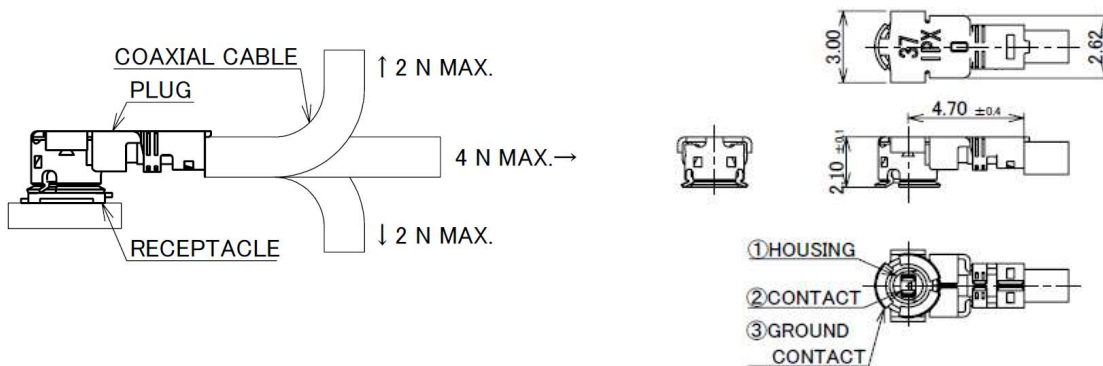
5. Drawing

5.1. Cable assembly

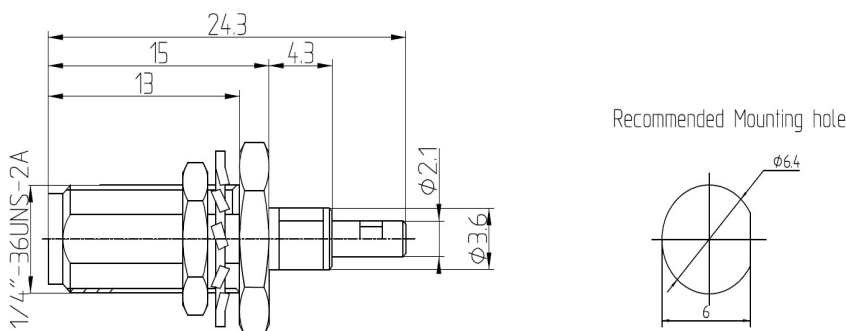


5.2. Connectors

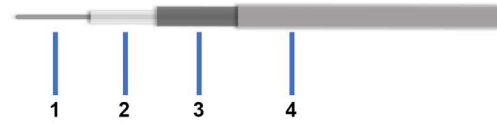
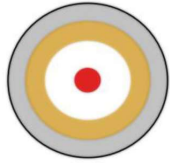
connector 1: IPEX MHF1 21351-112R-37



connector 2: SMA Jack Straight Connector



5.3. Cable Construction Specification



Cable Cross Section

		MATERIAL	DIAMETER (MM)
1	Inner Conductor	Silver plated copper clad steel	7 x 0.102
2	Dielectric	FEP	0.88
3	Outer Conductor	Silver Plated Copper Braid	1.10
4	Jacket	FEP	1.37

5.4. Bill of Material

		MATERIAL	FINISH	QTY
1	SMA Jack Bulkhead connector	Brass	Gold	1
2	IPEX MHF1	Brass	Gold	1
3	1.37 Coaxial Cable	FEP Jacket	Black	1
4	Heat Shrink Tube	PE	Black	1
5	Washer	Brass	Gold	1
6	Nut	Brass	Gold	1

6. Hazardous Material Regulation Conformance

The connector has been tested to conform to RoHS requirements.

A certification of conformance is available from Antenova's website.

Quality statements

Antenova's products conform to REACH and RoHS legislation. For our statements regarding these and other quality standards, please see antenova.com.



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