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DATASHEET

CASI248 - 100

Cable Assembly

1. Description

- High reliability connectors
- Low loss cable
- Low insertion loss RF connectors
- U.FL receptacle compatible

2. Applications

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	≦1.45
Durability	＞500 cycles
Temperature range	-55℃ to +155℃

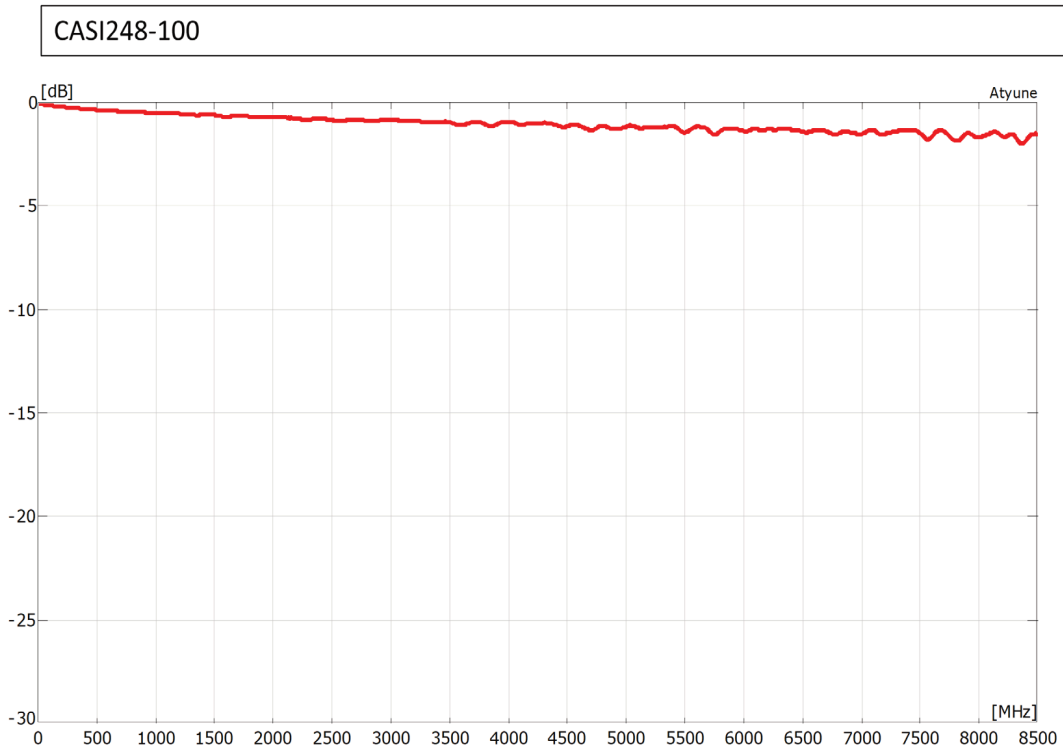
2.2. IPEX MHF 1 Connectors

IPEX part number – 21351-112R-37	
Impedance	50Ω
Frequency Range	DC ~ 6GHz
Rate Voltage	AC 60V
Withstanding Voltage	AC 200V/minute
Insulation Resistance	≧500mΩ/DC 100V
Contact Resistance	≦20mΩ
Temperature	-40℃ to +90℃
VSWR	≦1.50
Durability	30 cycles

2.3. Cable Specification

Electrical 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 (VMS)	1000
Max. Oper. Frequency (MHz)	6000
Operating Temperature	-55℃ to +200℃
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

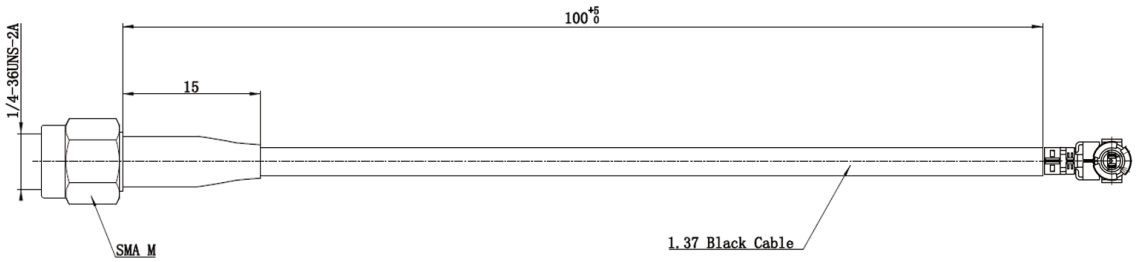


4. Part number

CASI248-100

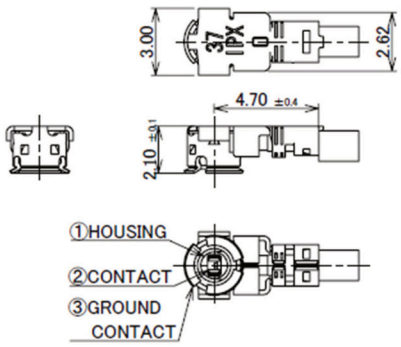
5. Drawing

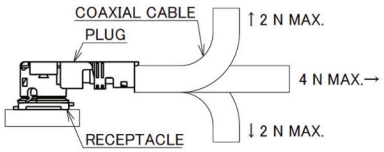
5.1. Cable assembly



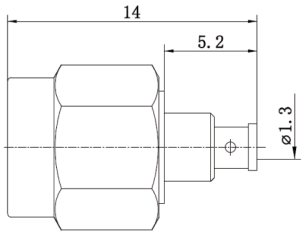
5.2. Connectors

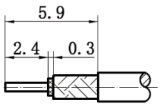
connector 1: IPEX MHF1 21351-112R-37



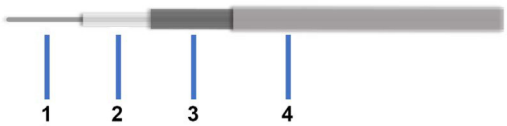


connector 2: :SMA Plug Connector





5.3. Cable Construction Specification



Cable Cross Section

Item	Description	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

Item	Description	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

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+ 44 (0) 23 9400 1023

Global headquarters

Antenova Ltd, 7 The Briars, Waterberry Drive, Waterlooville, Hampshire, PO7 7YH

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