

Product Number: SMALFN8-8100-250115
Product Name: Coaxial Cable



Specification For Approval

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Customer : 晶暉科技股份有限公司

Customer P/N : /

INVAX P/N : SMALFN8-8100-250115

Description : Coaxial Cable

Cortec Checked By:



Customer Approved By:



INVAX System Technology Corp.
4F. No. 815.Chung Hsiao East Rd.,Sec.5
Taipei, TAIWAN



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Xian-Xi Industrial, Sha-Tou Administration Zone,
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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	DC~6GHz
Impedance	50 Ohm
S.W.R.	≤ 2.0
Insertion Loss	< -1.5 dB
Voltage (breakdown)	> 500 V
Insulation Resistance	≥ 500 M ohm
Center Conductor Contact Resistance	≤ 25 m ohm
Outer Conductor Contact Resistance	≤ 15 m ohm
B. Material & Mechanical Characteristics	
Material of Conductor	Brass (Cu)
Pull Test (Retention)	≥ 27 Kg (270N) for Screw Type
Pull-Engagement Force	≤ 2.7 Kg (27N) for Plug Type
Pull-Separation Force	1~2 Kg (10 ~ 20 N) for Plug Type
Pull Test of SMA Connector	≥ 3 Kg
Mating Cycles	> 500
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

2. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Insertion Loss	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C3	Voltage Breakdown	MIL-STD-202G, 301 Test voltage should be applied between insulated portions, or between ground as specified.	Max Voltage: ≥ 500 V DC or directive material specification
C4	Insulation Resistance	MIL-STD-202G, 302, cond. B Test Voltage: 500 ± 50 V; between the insulated portions, or between ground as specified.	Resistance ≥ 500 M ohm or directive material specification
C5	DC Resistance	MIL-STD-202G, 303 Air Temp: 25°C; measured with test equipment	Directive material specification
C6	Contact Resistance	MIL-STD-202G, 307 Air Temp: 25°C; measured with test equipment	Directive material specification
M1	Vibration	MIL-STD-202G, 201A Amplitude: 0.03 inch (0.76mm); Freq: 10 to 55 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol. $\leq 5\%$
M2	Random Drop	Height: 1.5 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol. $\leq 5\%$
M3	Solderability	MIL-STD-202G, 210F, cond. A Solder iron: 260 ± 10 °C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	MIL-STD-202G, 211A, cond. A Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol. $\leq 5\%$
M5	Terminal-Torque Test	MIL-STD-202G, 211A, cond. E Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol. $\leq 5\%$
M6	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	MIL-STD-202G, 101E, cond. B Temp: 35°C; RH: $\geq 95\%$; NaCl solution: $\geq 5\%$; Time: 48 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. $\leq 5\%$
E2	Humidity	MIL-STD-202G, 103B, cond. B Temp: 40°C; RH: $\geq 95\%$; Time: 48 hours	After 2 Hours Recovery 1. No Visual Damage

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			2. Frequency Tol.<= 5%
E3	Thermal Shock	1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	MIL-STD-202G, 108A, cond. A Temp: 85°C; Time: 96 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2002/95/EC
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

3. Samples Test Data

Test Items		Requirements	No.1	No.2	No.3	No.4	No.5
C1	S.W.R.	TBD	ok	ok	ok	ok	ok
C2	Insertion Loss	TBD	ok	ok	ok	ok	ok
C3	Voltage Breakdown	> 500 V	> 500	> 500	> 500	> 500	> 500
C4	Insulation Resistance	> 500 Mohm	> 500	> 500	> 500	> 500	> 500
M4	Pull Force	spec	ok	ok	ok	ok	ok
M6	Dimension	drawing	ok	ok	ok	ok	ok

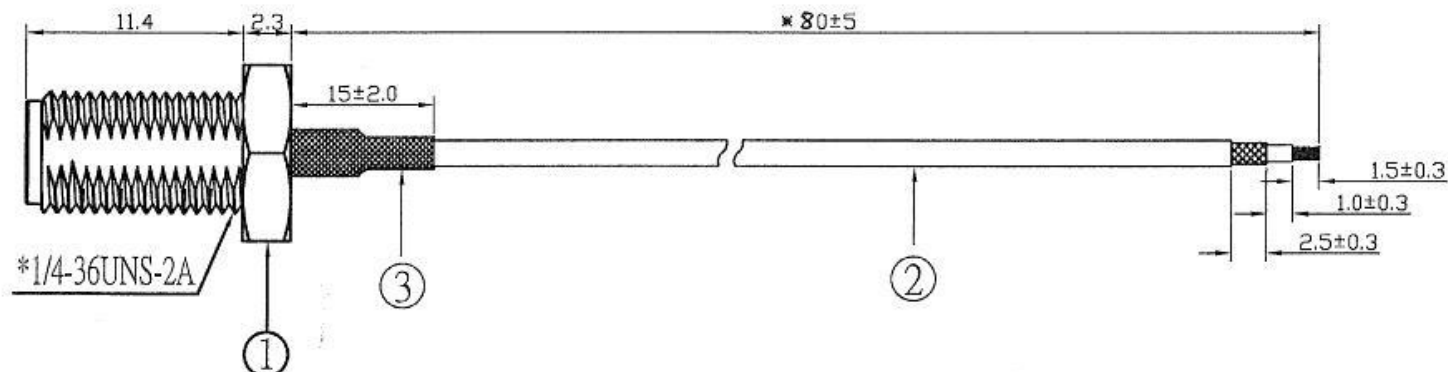
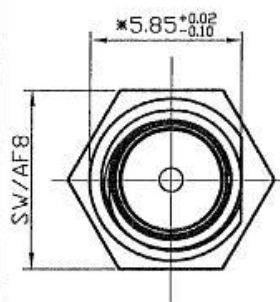
4.Mechanical Drawing

See attached files

RoHS

Compatible

"*"Stress



SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

3	Shrink Tub	HT-36	φ3.5*15mm	1
2	Cable	RG178; Color : Red	L= 80mm	1
1	SMA	Cu Au plated	180° Female	1
NO	Description	Material	Specification	Q'ty

Invax System Group.			Cortec Technology Inc.			
Cortec			Http://www.invaxsystem.com		Tel:886-2-27885218	
			E-mail: info@invax.com.tw		Fax:886-2-27831668	
TITLE: SMA / RG178 /Open						
PART NO.: SMALFN8-8100-250115			DWG NAME: SMALFN8-8100-250115.dwg			
APPROVED BY	CHECKED BY	DESIGNED BY			Tolerance	
Grant	Tony	Lvybao			UNITS: mm	X.X ±0.5
2011.04.27	2011.04.27	2011.04.27			SCALE:	X.XX ±0.3
					REVISION: B	X* ±1*