

Datasheet _ MG210

Products (Part number)

- Receptacle (MG210RE03)
- Plug to plug cable assembly 200mm, no mark (MGC10216)
- Plug to plug cable assembly 200mm, 1-line mark (MGC10217)
- Plug to plug cable assembly 200mm, 2-lines mark (MGC10218)
- Plug to plug cable assembly 200mm, 3-lines mark (MGC10219)

Accessory (Part number)

- Plug to Female SMAs cable assembly 140mm (TRA2PA5)
- Plug to Male SMAs cable assembly 170mm (TRA2PA6)
- Tweezer for Mating and unmating a plug (GJSZZA1)





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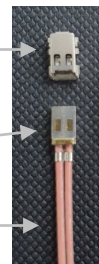
1. MG210 Products

1.1. Receptacle (P/N : MG210RE03)

1.2. Plug to plug cable assembly (P/N : MGC102XX)

1.2.1. Plug for cable (P/N : MG210PL02)

1.2.2. Raw cable (P/N : MT_32X1_B1)



2. Electrical & Mechanical Specification

2.1 Raw Cable (P/N : MT_32X1_B1)

Layers		Material	Thickness
1	Center Conductor	Silver Plated Copper [Solid]	0.203 [mm] / 0.008 [inch]
2	Dielectric	LDPFA [Extruded]	-
3	1 st / 2 nd Shield	Tin plated copper wire /Copper polyester tape	
4	Jacket	Polyester Tape & PFA	0.88 [mm] / 0.035 [inch]

Characteristic Impedance	Typ. 50 Ω
Operating Frequency	DC to 10 GHz
Temperature	-40 $^{\circ}\text{C}$ ~ +85 $^{\circ}\text{C}$
Velocity of Propagation	78% nominal
Minimum Bend Radius	4 mm / 0.157 inch
Shielding Effectiveness	<-70 dB

Insertion Loss		[25 $^{\circ}\text{C}$, at Sea Level]
Frequency	[dB/10cm]	[dB/FT]
1 GHz	- 0.17	- 0.530
2 GHz	- 0.25	- 0.762
4 GHz	- 0.37	- 1.115
6 GHz	- 0.47	- 1.421
10 GHz	- 0.65	- 1.957



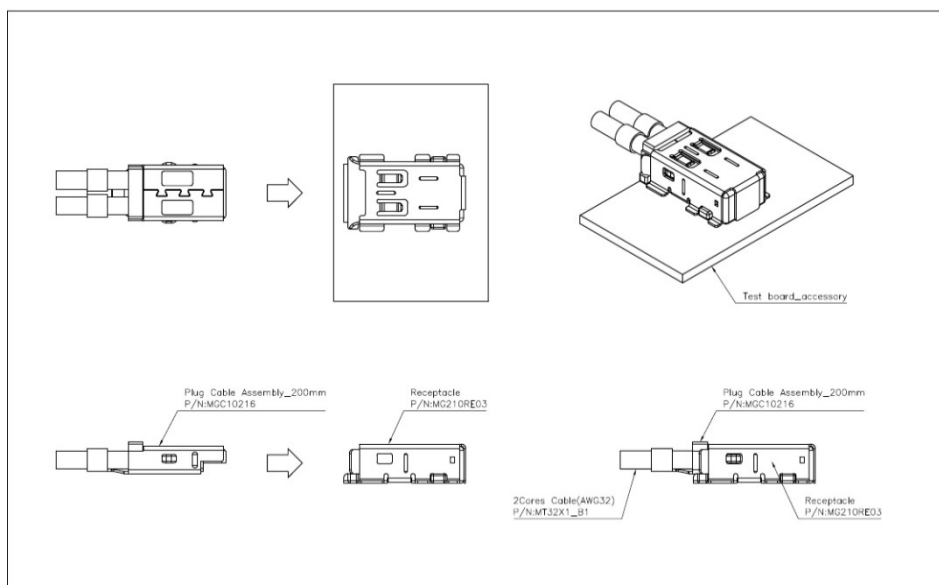
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2.2 MGC10216 & MG210RE03 _ both-ends mated condition

Specification	Frequency	Performance
VSWR (Max.)	10MHz ~ 10GHz	1.5
Insertion Loss (Min.)	DC ~ 10GHz	- 1.70dB
Crosstalk	DC ~ 10GHz	< -40dB

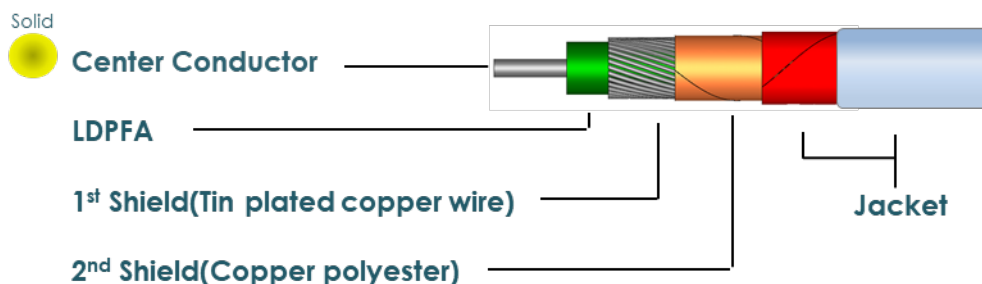
3. Structure Figure

3.1. MGC10216 Mated into MG210RE03



3.2. MT_32X1_B1

Flammability rating : UL94-V0





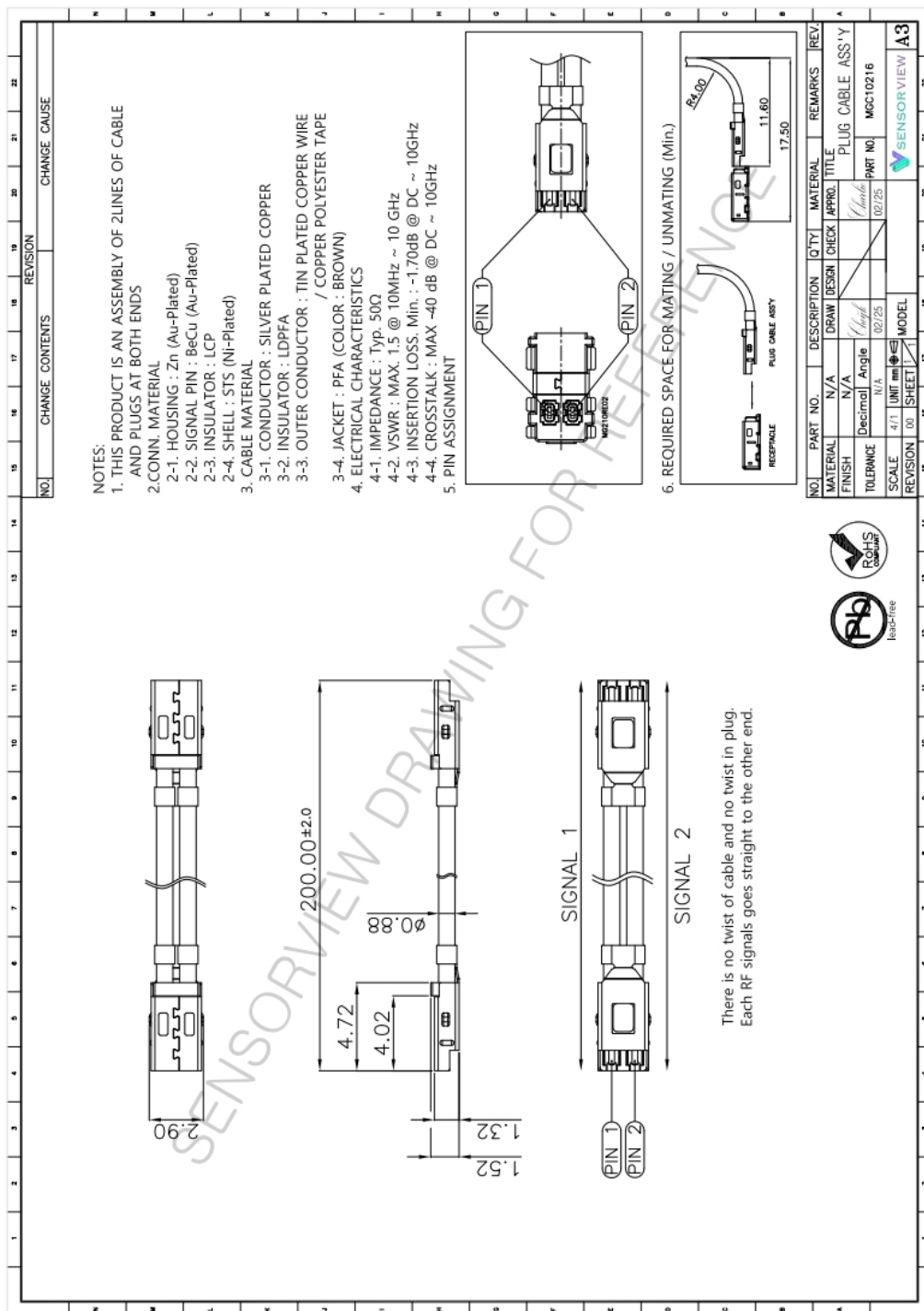
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4. Drawing

Length of cable can be modified by request

4.1. Plug to plug cable assembly 200mm, no mark (P/N : MGC10216)





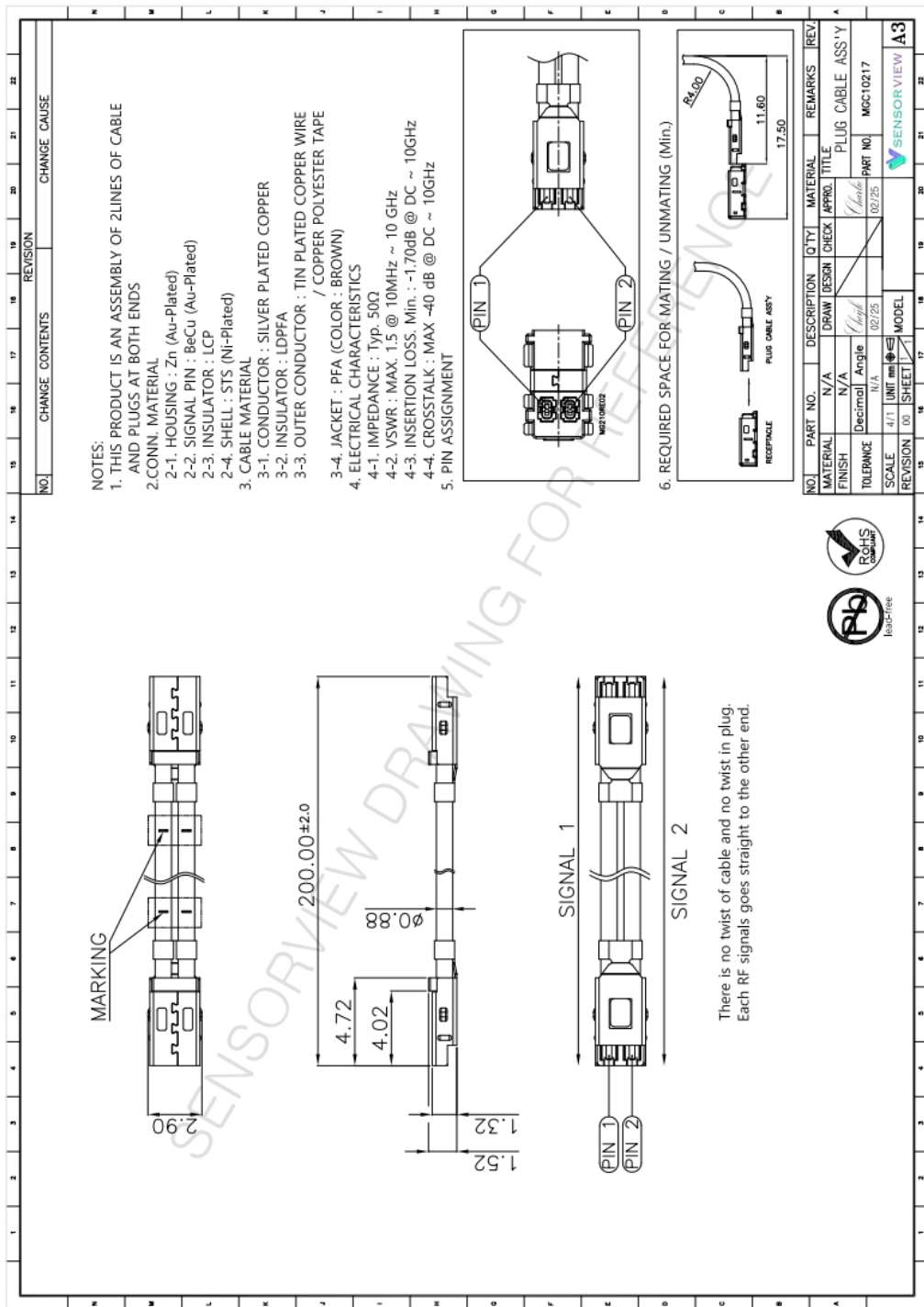
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4. Drawing

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4.2. Plug to plug cable assembly 200mm, 1-line mark (P/N : MGC10217)





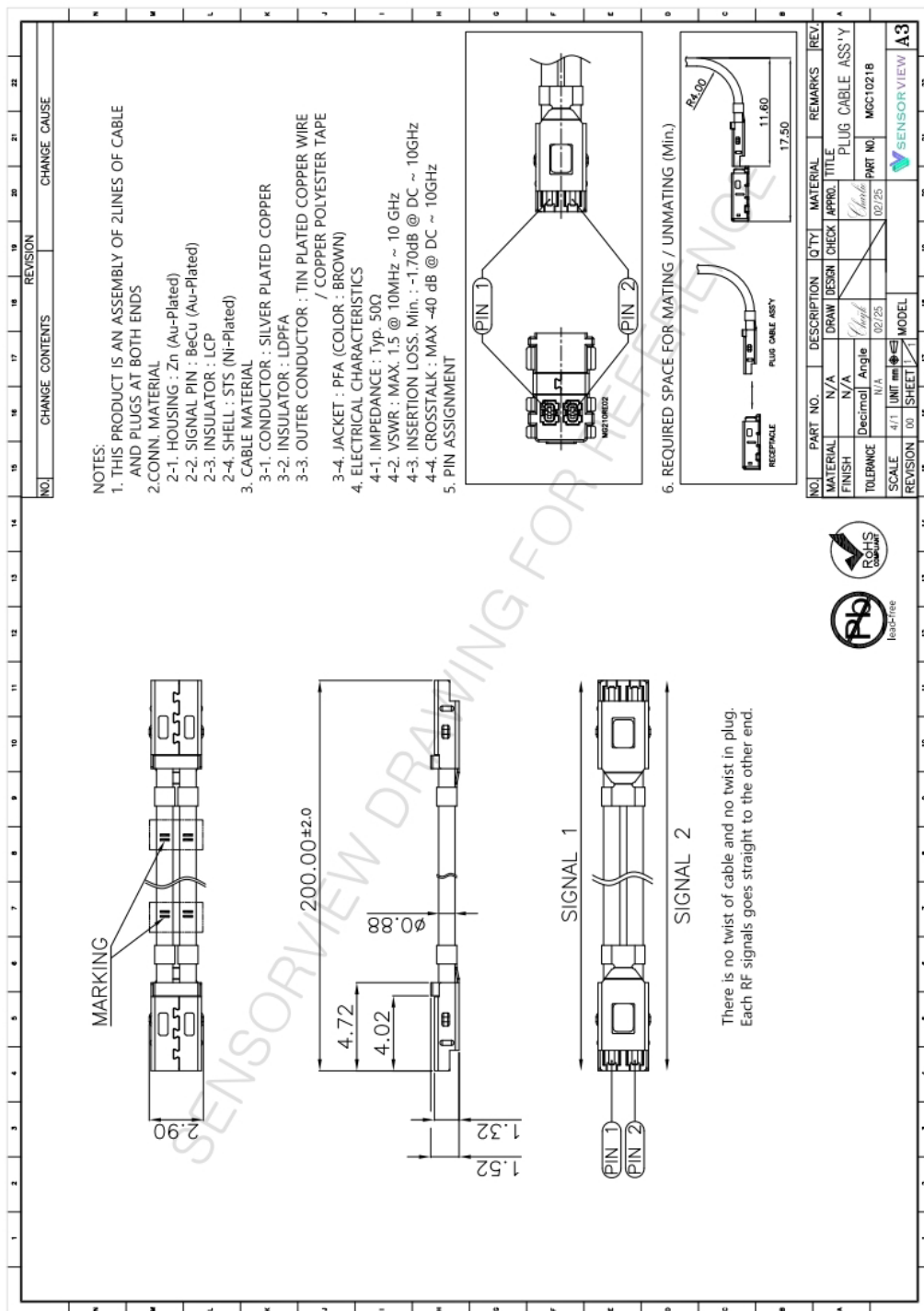
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4. Drawing

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4.3. Plug to plug cable assembly 200mm, 2-lines mark (P/N : MGC10218)





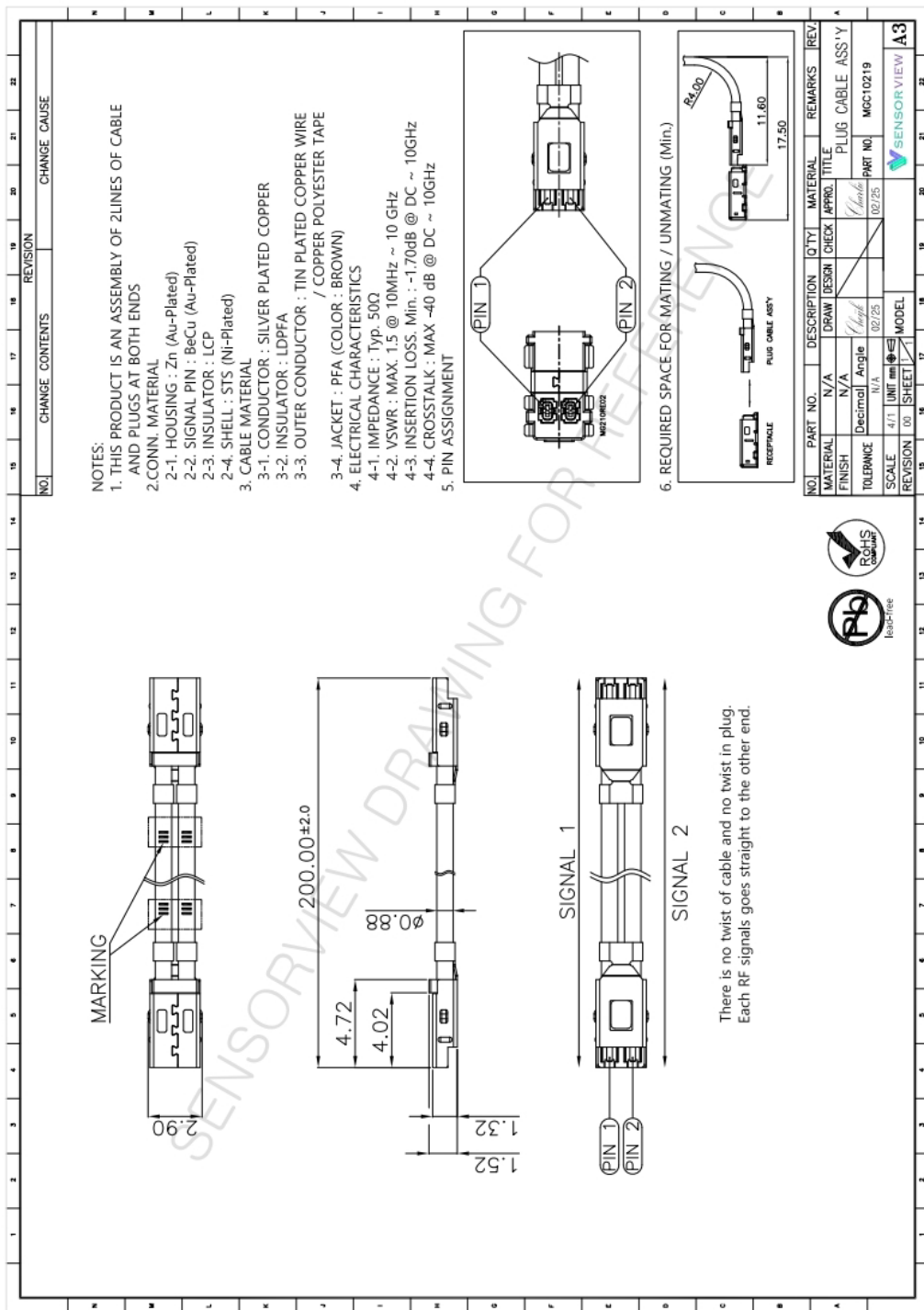
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4. Drawing

Length of cable can be modified by request

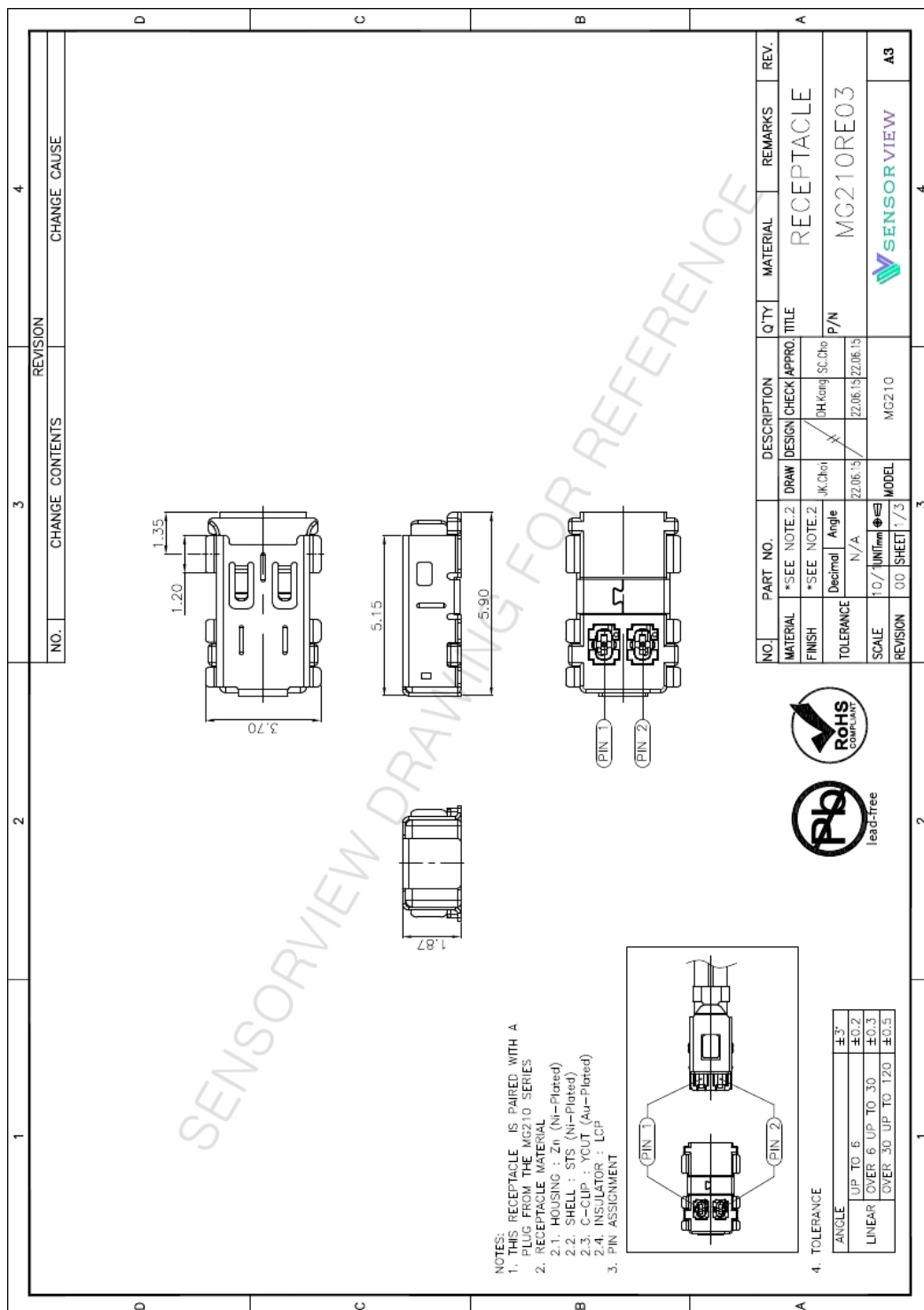
4.4. Plug to plug cable assembly 200mm, 3-lines mark (P/N : MGC10219)





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4.5. Receptacle (P/N : MG210RE03) [1/3]





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4.5. Receptacle (P/N : MG210RE03) [2/3]

No.	Parameter	Unit	Specification
1	Item		MG210 Receptacle
2	Applicable country		Korea
3	Environmental Conditions		Indoor
4	Operating frequency range	GHz	DC ~ 10
5	Connector type		Slide Type
6	Weight (Ass'y)	g	about 0.1
7	Impedance	Ω	50 (Typ.)
8	Insertion Loss	dB	See MG210 Plug Cable Assembly Specification
9	VSWR [Return Loss]	dB	1.5:1 [-13.97dB] (Max.) < With MG210 Plug Cable Assembly >
10	Crosstalk	dB	-40 (Max.) < With MG210 Plug Cable Assembly >
11	Contact Resistance	mΩ	Center / Outer 40 (Max.) < With MG210 Plug Cable Assembly >
12	Insulation Resistance	MΩ	500 < With MG210 Plug Cable Assembly >
13	Dielectric voltage-withstand	V	100 < With MG210 Plug Cable Assembly >
14	Rated Voltage	Vrms	85 < With MG210 Plug Cable Assembly >
15	Durability	Cycle	30 (Max.)
16	Mating		35 (Max.)
17	De-Mating Force	N·m	10 (Min.)
18	Operating Temperature	℃	-40 ~ 85
19	Storage Temperature	℃	-40 ~ 110
20	Salt Spray (Corrosion)		MIL-STD-202G, Method 101, Condition B
21	Thermal Shock		MIL-STD-202G, Method 107, Condition B1
22	High/Low Temperature		EIA-364-17
23	Vibration		MIL-STD-202G, Method 204, Condition A
24	Moisture Resistance		MIL-STD-202G, Method 106

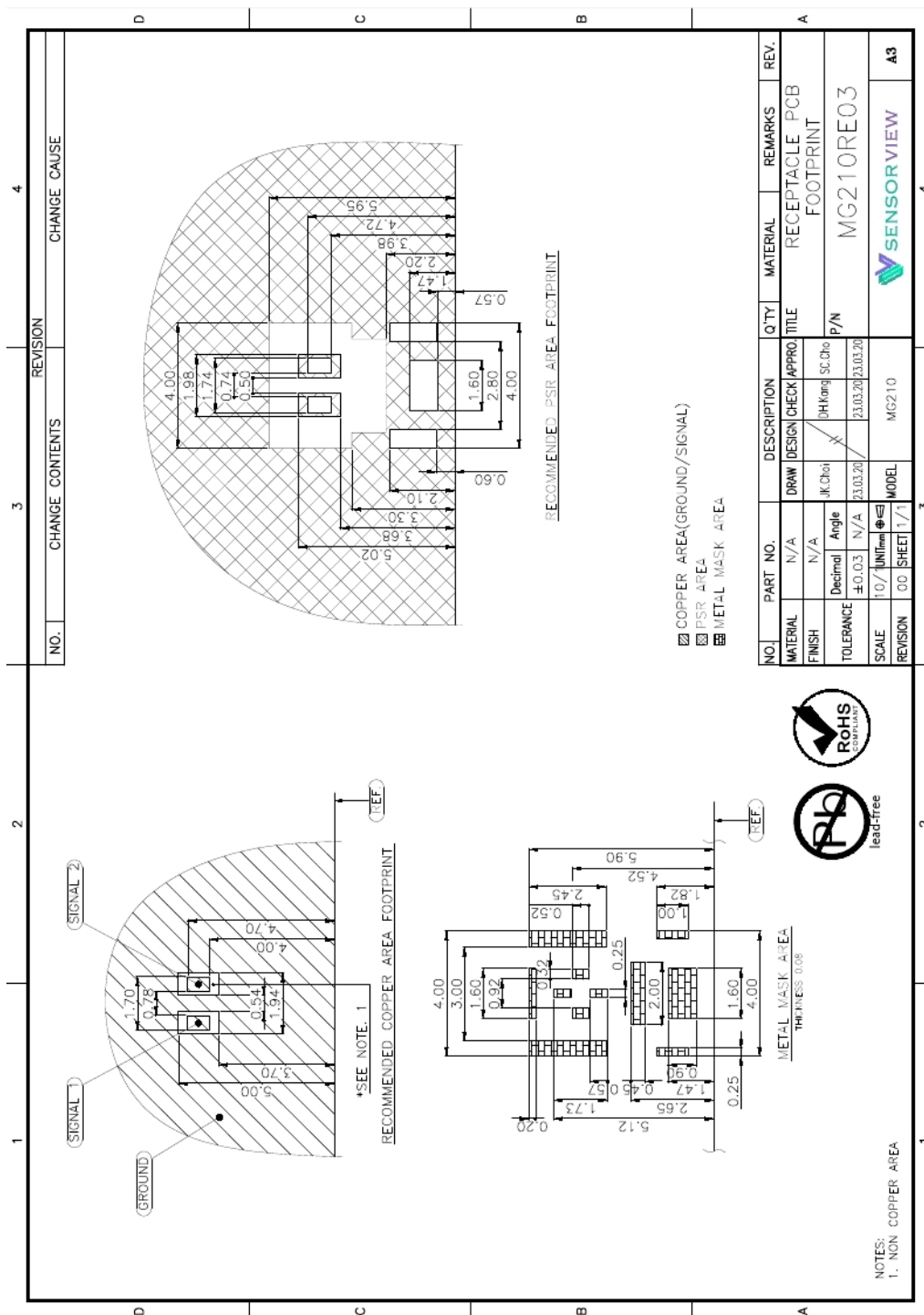
NO.	PART NO.	DESCRIPTION	QTY	MATERIAL	REMARKS	REV.
MATERIAL	*SEE NOTE.2	DRAW	DESIGN	CHECK	APPRO.	TITLE
FINISH	*SEE NOTE.2	JK	Choi	SC	Choi	RECEPTACLE
TOLERANCE	Decimal Angle ±0.05 N/A	22.06.15	22.06.15	22.06.15	22.06.15	P/N MG210RE03
SCALE	10 / UNITmm	MODEL	MG210			
REVISION	00	SHEET	2/3	A3		



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4.5. Receptacle (P/N : MG210RE03) [3/3]





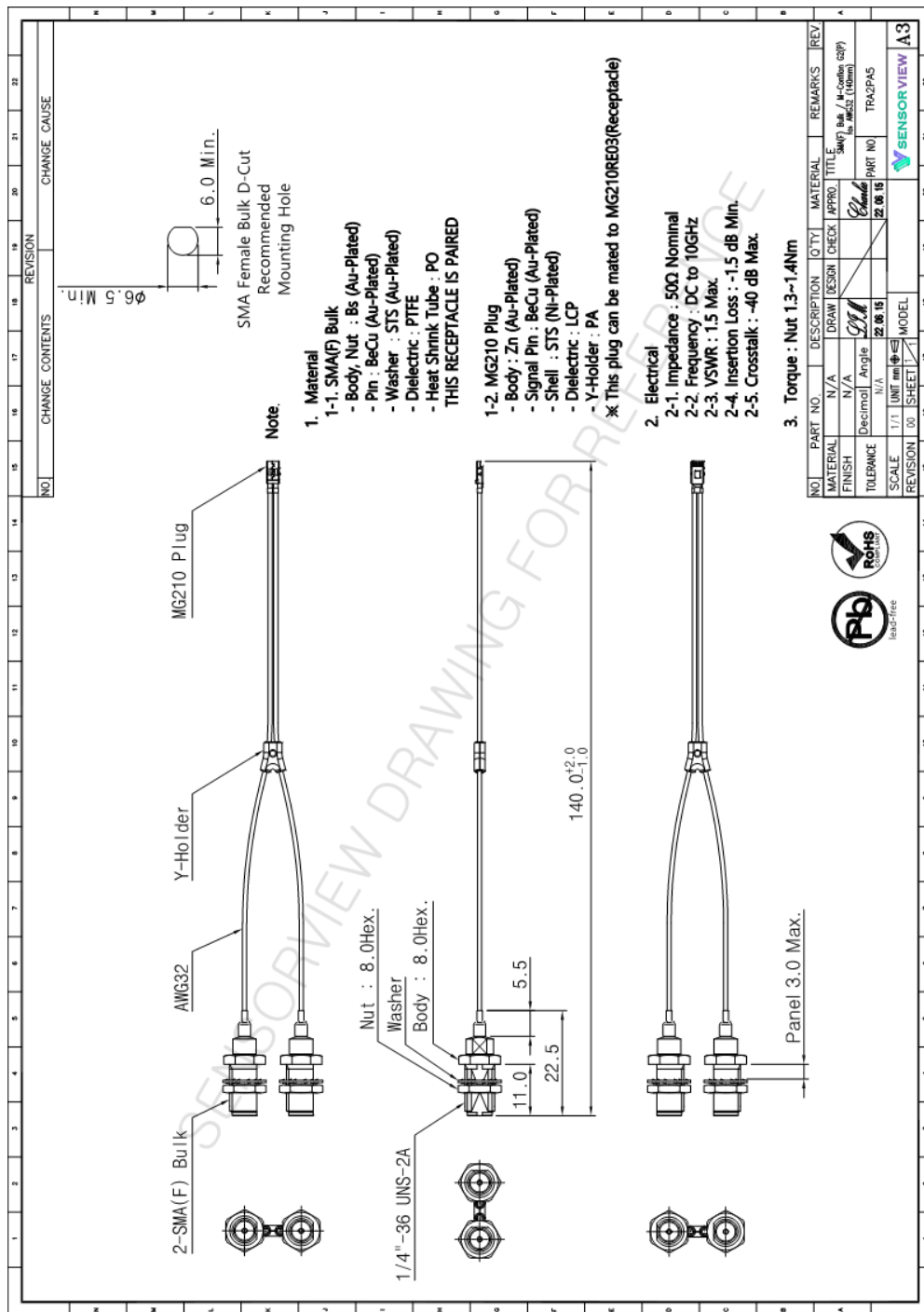
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4.6. Plug to Female SMA's cable assembly 140mm (P/N : TRA2PA5)

[Recommended accessory]

Length of cable can be modified by request





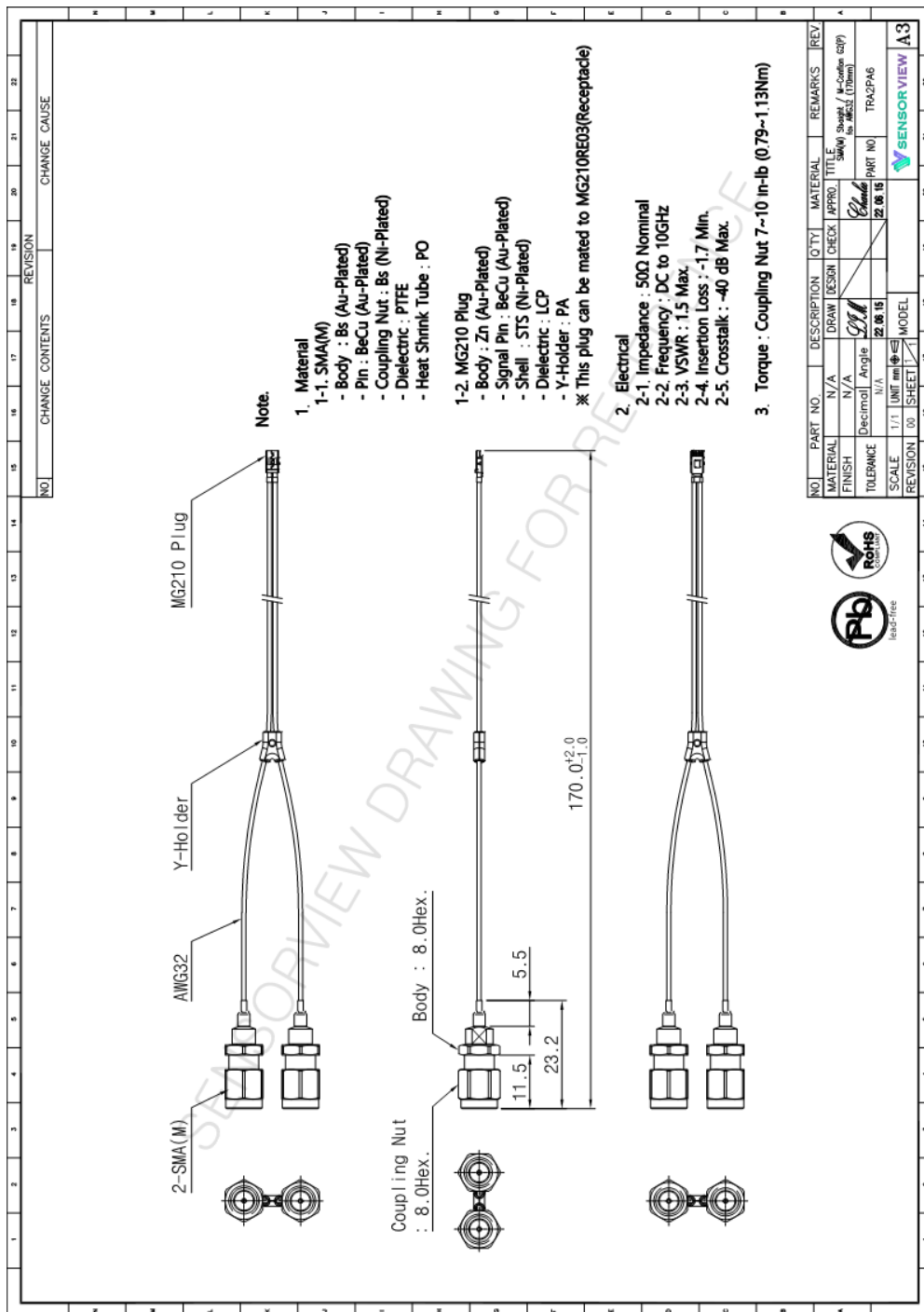
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4.7. Plug to Male SMAs cable assembly 170mm (P/N : TRA2PA6)

[Recommended accessory]

Length of cable can be modified by request





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4.8. Tweezer for Mating and unmating a plug (P/N : GJSZZA1)

[Recommended accessory]

NOTES:
 1. MATERIAL
 1.1. TWEEZERS : STS (Passivated)
 1.2. HEADER : BeCu (TBD)
 1.3. HEAT SHRINK TUBE : PO(Blue Color)
 1.4. LABEL : SILVER PET

No.		PART NO.		DESCRIPTION		QTY		MATERIAL		REMARKS		REV.	
MATERIAL		SEE NOTE. 1		DRAW		DESIGN		CHECK		APPRO		TITLE	
FINISH		SEE NOTE. 1		Angle		JK Choi		DH Kang		SC Cho		P/N	
TOLERANCE		Decimal		N/A		21.11.10		21.11.10		21.11.10		GJSZZA1	
SCALE		1/1		UNIT(mm)		MODEL		MG210		Mating and Umating Jig		A3	
REVISION		00		SHEET 1/1		SENSORVIEW		A3		A		4	