MS-A2-2J2-A

Flat Square_2 in 1 Antenna

DSRC / GNSS

Electrical Specifications

DSRC Antenna Characteristics

Frequency Range, MHz	5850-5950
VSWR	2.0 Max.
Peak Gain, dBi	2.0 Typ.
Efficiency, %	49
Polarization	Linear
Impedance	50Ω

DSRC test cable length：1m (CFD-200)

GNSS Antenna Characteristics

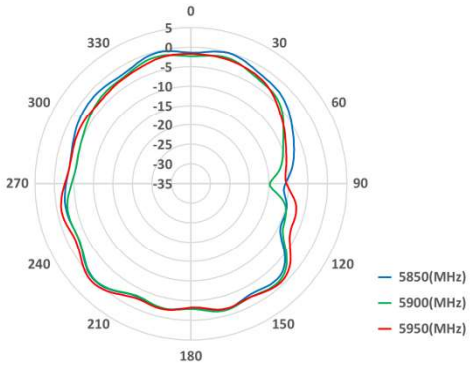
Center Frequency, MHz	1561±2	1575.42±3	1602±4
VSWR	3.0 Max.		
Peak Gain, dBi	3.5 Typ.	3.5 Typ.	3.5 Typ.
Efficiency, %	58	59	63
Polarization	Linear		
Impedance	50Ω		

GNSS test cable length：10cm(RG-174)

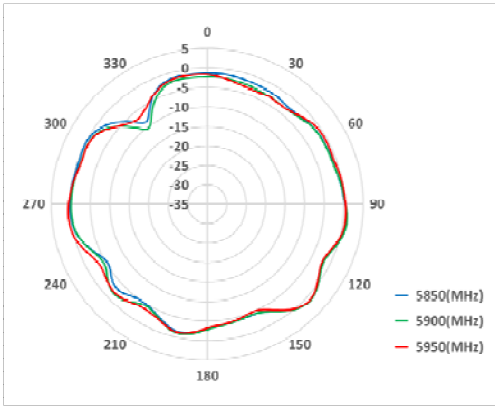
GNSS LNA Properties

Frequency Range, MHz	1559-1608
Impedance	50Ω
Output Return Loss($\|S_{11}\|$), dB	10 Min.
Gain@ 3.3V, dB	28±3
Noise Figure@ 3.3V, dB	2.5 Typ.
DC Power Input,V	3.3
Power Consumption@ 3.3V, mA	9±2.5
ESD Withstand Voltage, KV	±8 contact; ±15 air

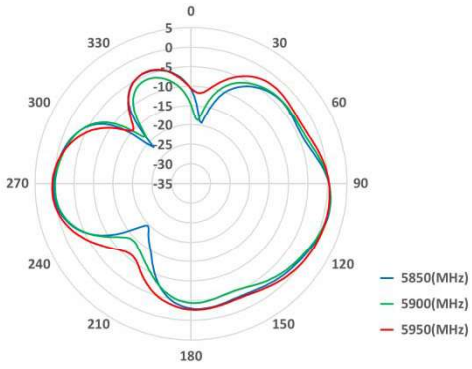
DSRC Antenna 2D Patterns



X-Z

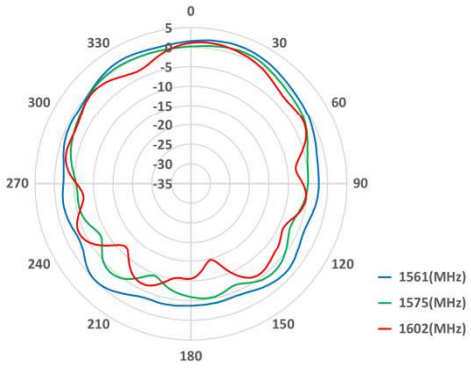


Y-Z

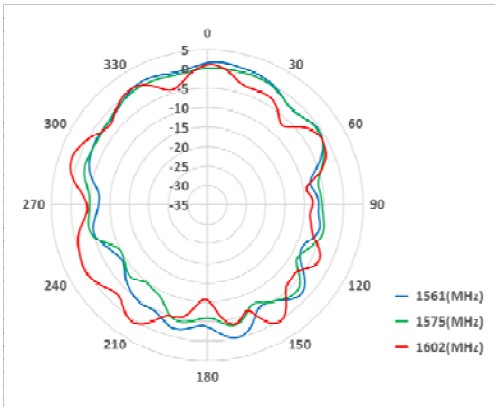


X-Y

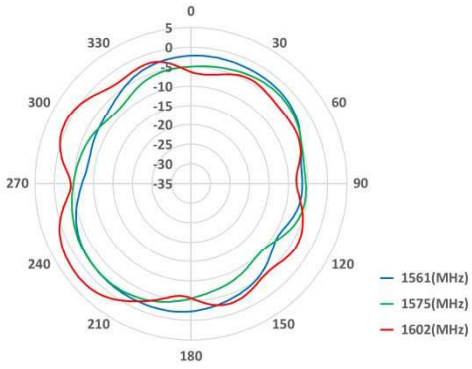
GNSS Antenna 2D Patterns



X-Z



Y-Z



X-Y

Mechanical Specifications

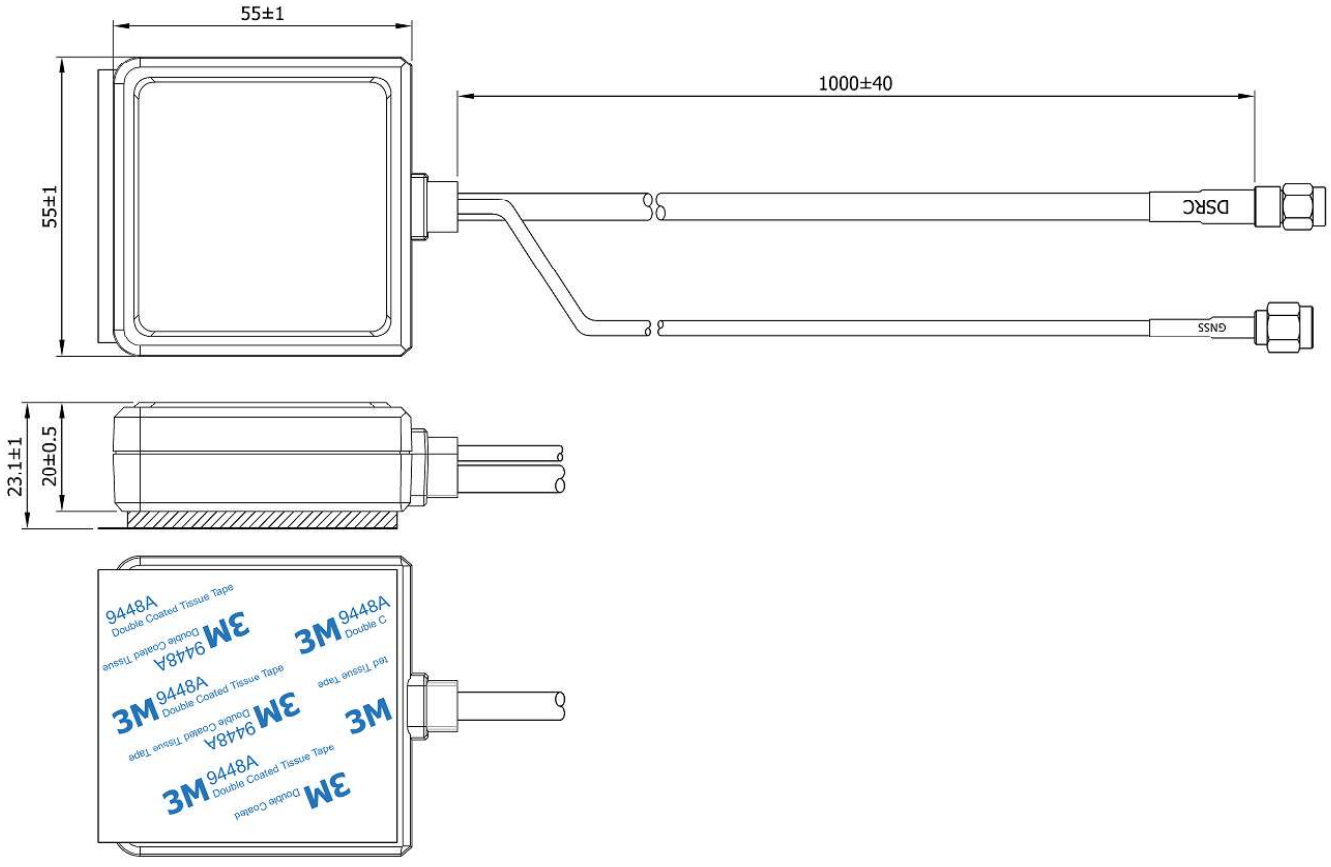
Environmental

Antenna Dimensions	(L)55×(W)55×(H)23.1 mm^3
Weight	103g
Mounting Function	Adhesive Mount
Operating Temperature	-40~ + 85°C
Housing Material & Color	PC & Black / Black
Cable	GNSS : RG-174 DSRC : CFD-200
Connector	SMA or your specification
Waterproof	IPX5

Reliability Test

Cold Temperature	-40°C,24Hr
High Temperature	+85°C,48Hr
Composite Temperature/Humidity Cycling	-40~+85°C,60%RH,1 Cycle(8Hr),24Hr
Thermal Shock	-40°C /30min → 5 min → +85°C /30min,48Hr

Mechanical Drawing



Unit：mm