

socionext™  
for better quality of experience

■ **Simulated antenna radiation pattern**

- **SC1232AR3**
- SC1233AR3

# SC1232AR3: Simulated antenna radiation pattern

## ■ $\epsilon_r=2.7$ (e.g. Lower relative permittivity acrylic plate)

(1) W=1.5mm / d=1mm

**Amount of relative TX& RX antenna gain is ranked**

		Thickness of dielectric plate: W [mm]						
		1.0	1.5	2.0	3.0	4.0	5.0	6.0
Distance from PKG to dielectric plate: d [mm]	0	A	A	B	B	B	B	B
	1	A	B	B	B	A	A	B
	2	B	B	C (1)	B	A	B	C
	3	B	C	B	B	A	B	B
	4	B	B	B	A	A (4)	B	B
	5	B	A	A	A	A	A	A
	6	A	A	A (2)	A	A	A	A
	7	A	A	B	B	A	A	A
	8	B	B	B	B	A (5)	B	B
	9	B	B	B (3)	B	A	B	B
	10	B	B	B	A	A	B	B
	11	B	B	A	A	A	B	A
	12	A	A	A	A	A	A	A

A: > -1dB

B: > -6dB

C:  $\geq$  -6dB

# Antenna radiation pattern (SC1232AR3)

■  $\epsilon_r=2.7$ ,  $W=1.5\text{mm}$ ,  $d=1\text{mm}$

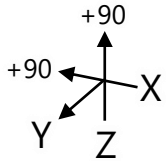
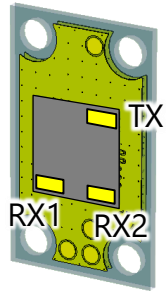
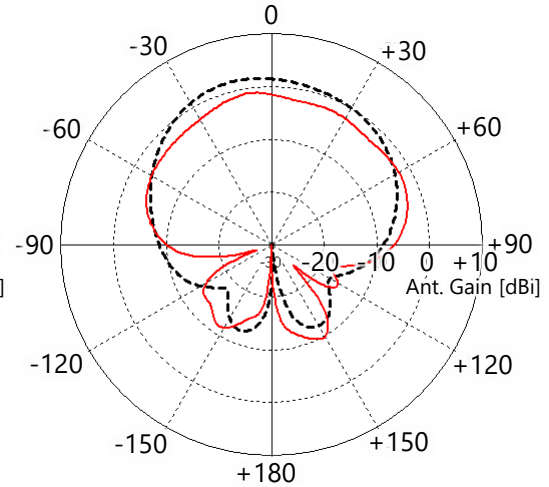
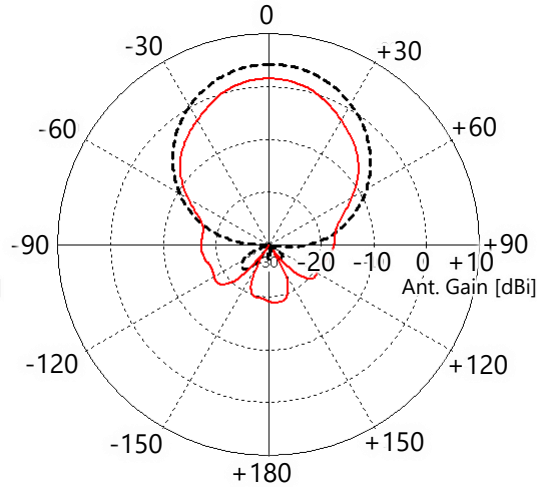
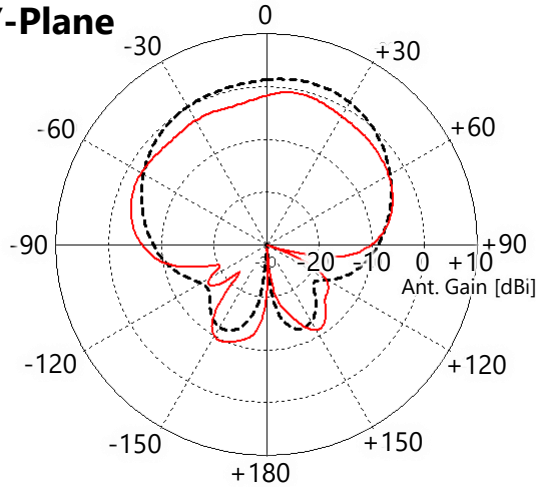
Maximum antenna gain: 2dBi

**RX(Wide)**

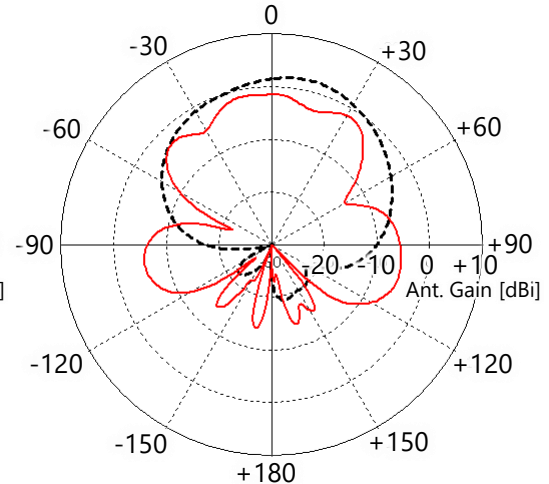
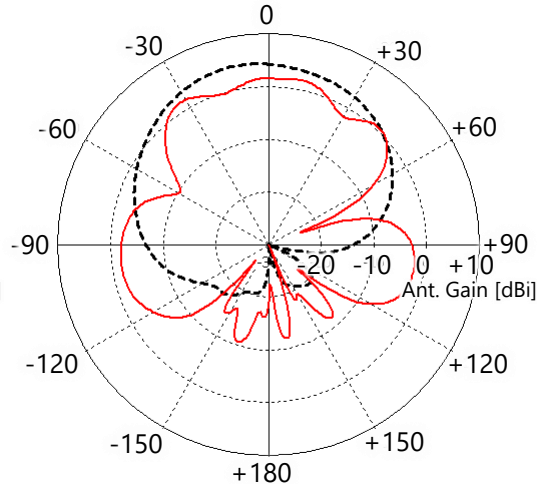
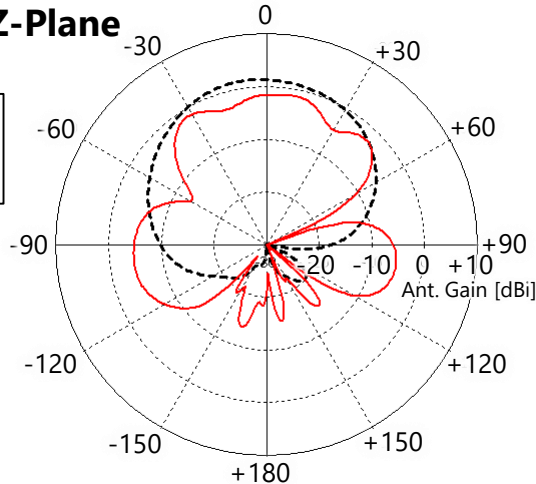
**RX(Narrow)**

**TX**

**XY-Plane**



**YZ-Plane**



--- w/o plate  
— w/ plate