

2GHz~18GHz PLANE SPIRAL ANTENNA ARRAY

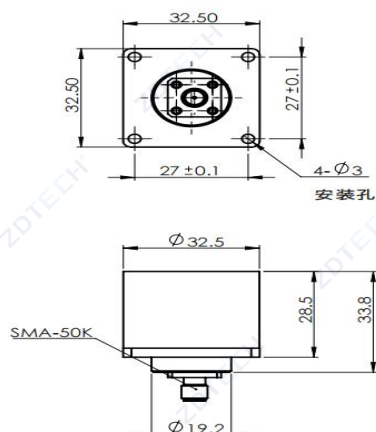
Model: ZD20180D32-AP



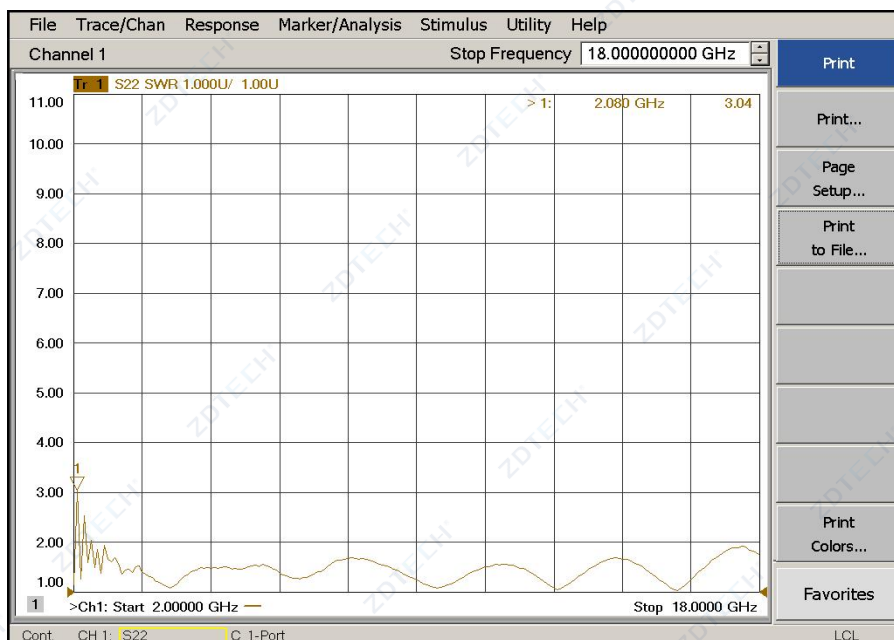
1. Technical Index

Frequency Range	2-18GHz
Gain In The Coverage Area	$\geq -14\text{dBi}$ ($2\text{GHz} \leq f < 2.5\text{GHz}$) $\geq -8\text{dBi}$ ($2.5\text{GHz} \leq f < 3\text{GHz}$) $\geq -5\text{dBi}$ ($3\text{GHz} \leq f \leq 18\text{GHz}$)
Standing Wave	≤ 2.5 (typical value)
space coverage	Azimuth $\pm 45^\circ$, Elevation $\pm 45^\circ$
Joggle	SMA-50K (stainless steel)
Proximal Paravalue (Within $\pm 90^\circ$ azimuth and $\pm 90^\circ$ pitch range)	$\geq 10\text{dB}$
Polarization Method	Right-handed circular polarization
Axial Ratio	$\leq 3\text{dB}$ (typical value)
Weight	$\leq 60\text{g}$
Antenna Size	$\leq 32.5\text{mm} \times 32.5\text{mm} \times 3.8\text{mm}$ (excluding connectors)
Antenna Cavity Material	Alufer
Working Temperature	$-50^\circ\text{C} \sim +70^\circ\text{C}$
Storage Temperature	$-55^\circ\text{C} \sim +60^\circ\text{C}$
Impedance	50Ω
Power Handling Capacity	Continuous wave 5W
Vibration Resistance	The maximum vibration test conditions are 14.8g in the X direction (antenna normal) and 12.7g in the Y/Z direction, with a vibration test duration of no less than 4 hours per axis.

2.Dimensions (Unit: mm)



3.Standing wave



4.Wave Speed Width

service frequency(GHz)	3dB beam width(°)phi=0	3dB beam width(°)phi=90
2	97.3	100.5
4	130.0	127.5
6	67.5	87.5
8	70.0	77.5
10	62.5	110.0
12	60.0	82.5
14	87.5	70.0
16	90.0	112.5
18	110.0	90.0

5. Typical Direction Map

