

# UWB Chip Antenna 3200 ~ 7200MHz



8.0 x 6.0 x 1.2 mm

## ACA-107-T

**\*This product ACA-107-T is discontinued for purchase.  
Last Time Buy Date: Jan 31st, 2018 \***



RoHS / RoHS II Compliant



MSL = 1

### FEATURES:

- Chip Antenna covering UWB bands from 3200MHz to 7200MHz
- Matching via metalized stub
- Constructed from solid dielectric ceramic material
- Suitable for RoHS compliant reflow
- Peak Gain (Azimuth) 4.16 @ 6200MHz
- Average Gain (Azimuth) -1.10dBi @ 6200MHz
- VSWR 5.0 : 1 max
- Size – 8.0 x 6.0 x 1.2mm (0.314 x 0.236 x 0.047 inch)
- Non Ground Mounting type
- Linear Polarization
- Matched to 50 Ohm.

### APPLICATIONS:

- 3200 ~ 7200MHz
  - UWB as defined by the ITU-R and FCC
  - Location Services
  - Real Time tracking
  - Medical Equipment
  - WBAN

### STANDARD SPECIFICATIONS

#### Maximum Ratings

Item	Value
ESD Voltage	15kV [HBM Class 3B]
Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-40°C to + 85°C

#### 2D MEASUREMENTS

Frequency Range [MHz]				3200 ~ 7200				
VSWR				(Typ 4:1) 5:1 Max				
Frequency [MHz]				3200	4200	5200	6200	7200
Gain	Azimuth	Theta	Peak	-0.88	2.73	2.51	4.16	1.31
			Average	-4.26	-1.22	-1.88	-1.10	-4.82
			Efficiency	37.50	75.50	64.86	77.62	32.96
		Phi	Peak	-3.84	-2.16	-1.91	-2.61	-5.20
			Average	-9.61	-8.20	-8.16	-9.96	-11.63
			Efficiency	10.96	15.13	15.27	10.09	6.87
	Elevation 1	Theta	Peak	-5.05	-2.32	-1.03	0.30	-0.68
			Average	-10.36	-8.84	-7.90	-6.99	-8.06
			Efficiency	9.20	13.06	16.21	19.99	15.63
		Phi	Peak	-2.99	1.98	1.81	2.92	0.20
			Average	-6.65	-3.30	-3.37	-3.04	-3.71
			Efficiency	21.62	46.77	46.02	49.65	42.55
	Elevation 2	Theta	Peak	-5.83	-3.38	-2.05	0.26	-3.56
			Average	-10.76	-9.16	-7.01	-5.74	-8.27
			Efficiency	8.39	12.13	19.90	26.66	14.89
		Phi	Peak	-0.52	2.32	1.52	1.39	1.12
			Average	-5.23	-3.30	3.30	-3.90	4.74
			Efficiency	29.99	46.77	43.05	40.73	33.57





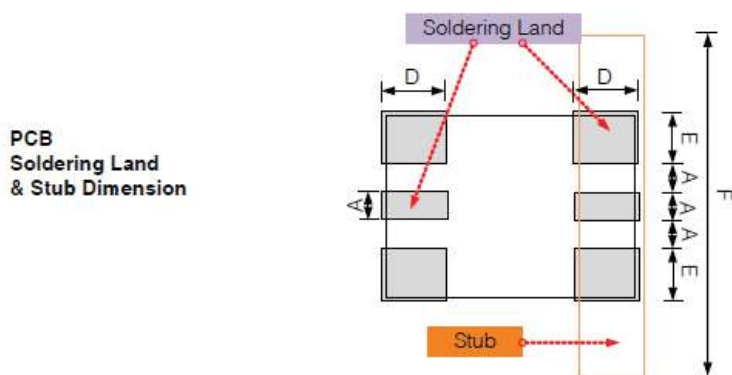
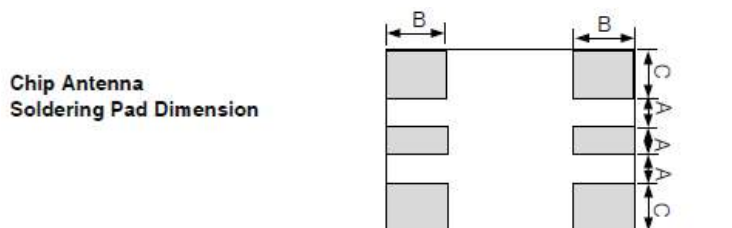
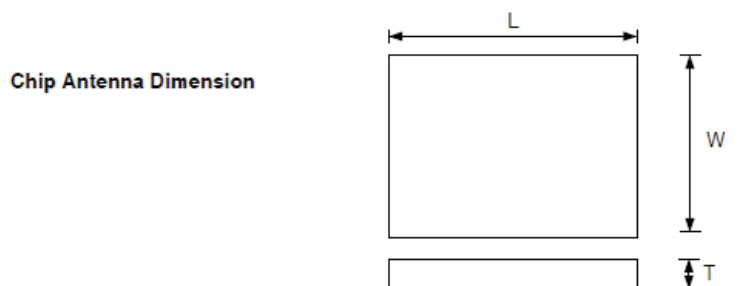
8.0 x 6.0 x 1.2 mm

### PART IDENTIFICATION:

ACA-107-

Packaging
Blank: Bulk
T: Tape and Reel

### OUTLINE DIMENSIONS:



Parameter	L	W	T	A	B	C	D	E	F
Value (mm)	8.0	6.0	1.2	1.0	2.0	1.5	2.1	1.6	13.0
Tol: ± 0.1mm									

(Dimensions: mm)



8.0 x 6.0 x 1.2 mm

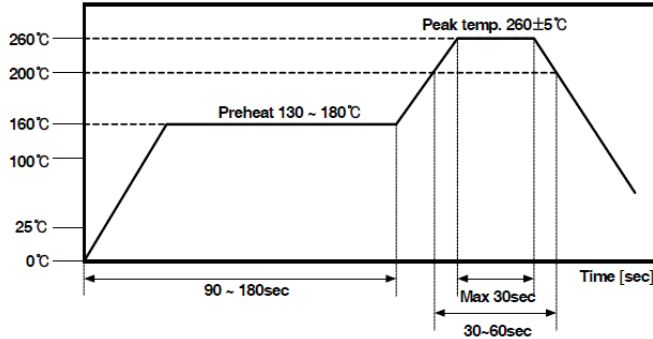
**ACA-107-T**



RoHS / RoHS II Compliant



## REFLOW PROFILE:

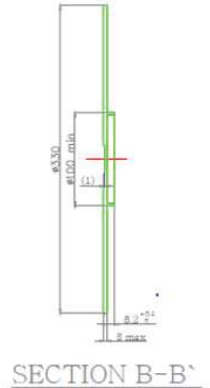
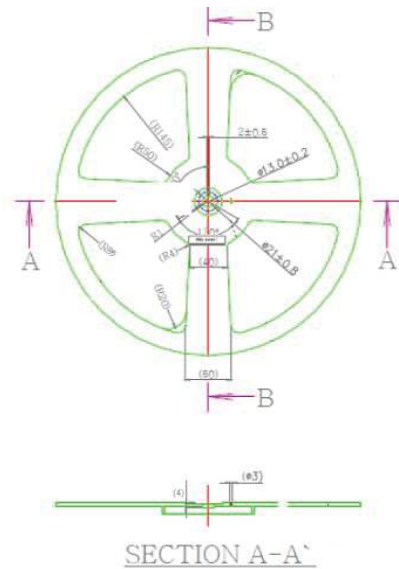
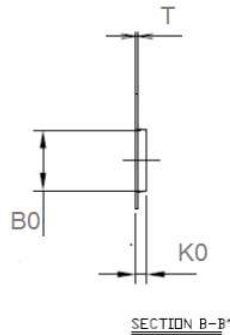
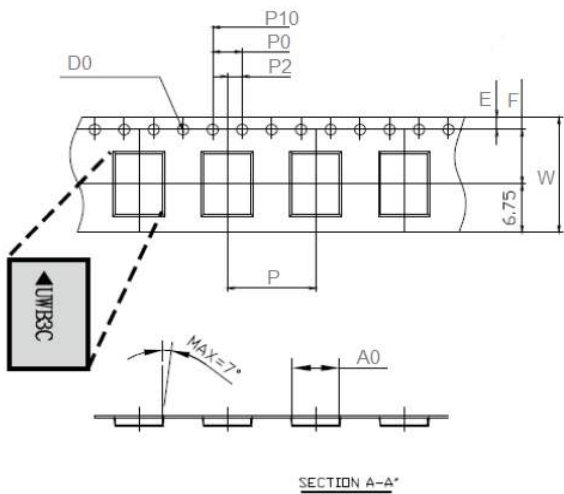


### Manual Soldering

Manual Soldering	Condition
Pre-Heating Temperature	120 °C , 60 ~ 300 sec
Soldering Temperature	340°C ± 5°C , 5 sec max per each terminal

## TAPE & REEL:

**Packaging: 3,500 Units Per Reel**



A0	6.4±0.10mm	E	1.75±0.10mm
B0	8.4±0.10mm	F	7.50±0.10mm
K0	1.4±0.10mm	T	0.3±0.05mm
D0	Ø1.5±0.1mm	W	16.00±0.30mm
P	12.0±0.10mm	P0	4.0±0.10mm
P2	2.0±0.10mm	P10	40.0±0.15mm

(Dimensions: mm)

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