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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# UWB Chip Antenna 3200 ~ 7200MHz

## 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



8.0 x 6.0 x 1.2 mm

### 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

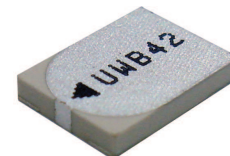
### STANDARD SPECIFICATIONS

#### 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

**ACA-107-T**



RoHS / RoHS II Compliant

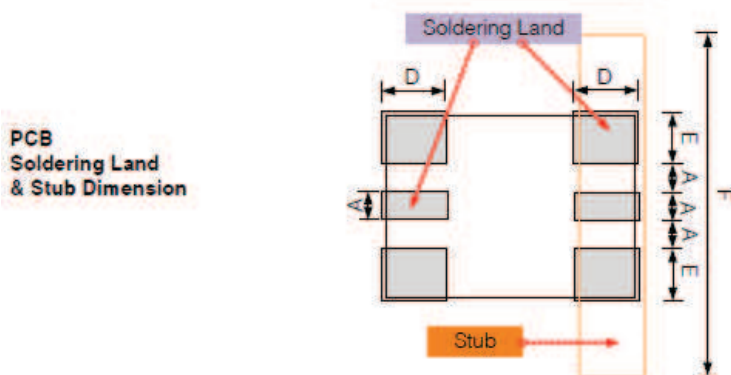
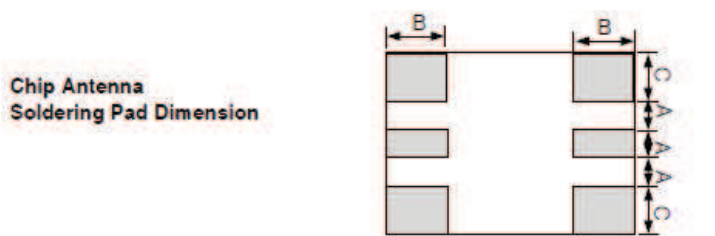
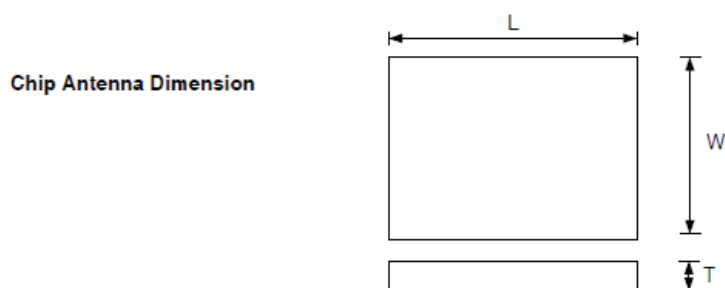


## PART IDENTIFICATION:

ACA-107-

Packaging
Blank: Bulk
T: Tape and Reel

## OUTLINE DIMENSIONS:

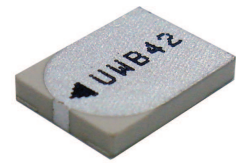


Parameter	L	W	T	A	B	C	D	E	F
Value (mm)	8.0	6.0	1.2	1.0	2.0	1.5	2.1	1.6	13.0
Tol: ± 0.1mm									

(Dimensions: mm)







8.0 x 6.0 x 1.2 mm

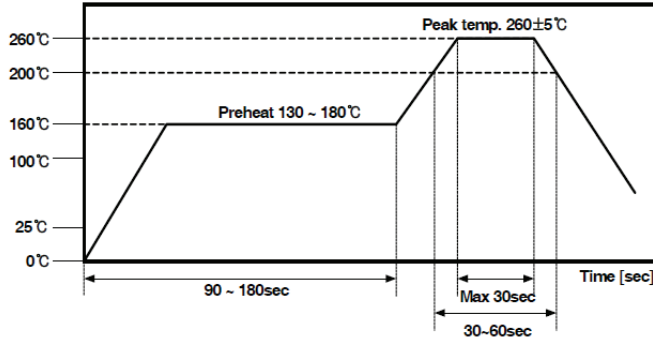
## ACA-107-T



RoHS / RoHS II Compliant



### REFLOW PROFILE:

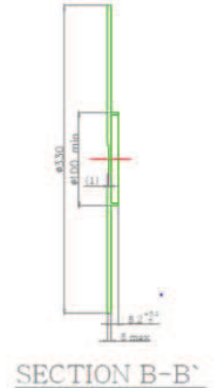
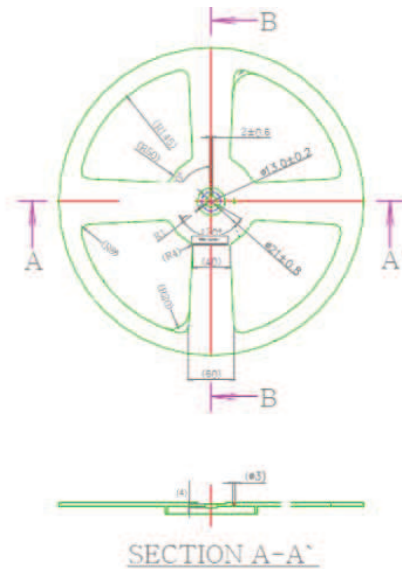
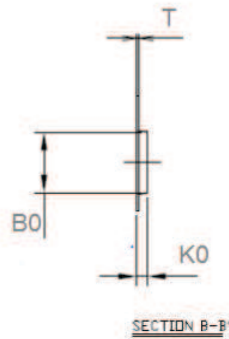
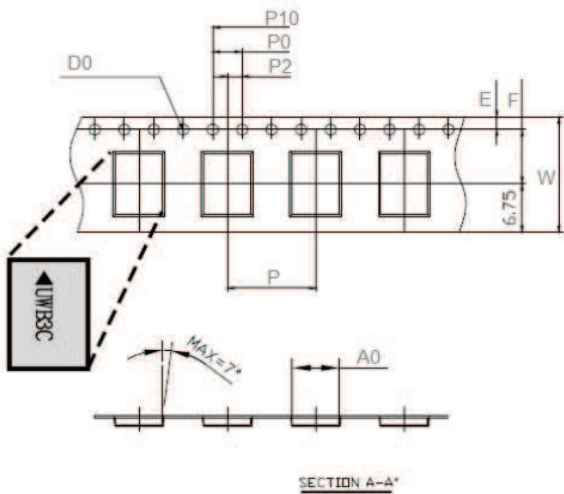


### Manual Soldering

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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