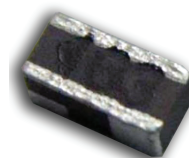


# GPS Chip Antenna 1575.00MHz



3.0 x 1.5 x 1.2 mm

## ACA-104-T



RoHS / RoHS II Compliant



Moisture Sensitivity Level (MSL) – MSL = 1

### FEATURES:

- Chip Antenna constructed from solid dielectric ceramic material
- Suitable for RoHS compliant reflow
- Gain 1.73 (3D Peak), -4.43 (3D Avg) [dBi]
- VSWR 1.0 ~ 3.0: 1 max
- Compact size - 3.0x1.5x1.2mm (0.118x0.059x0.047inch)
- Non Ground Mounting type.
- Linear Polarization
- Matched to 50 Ohm.

### APPLICATIONS:

- GPS applications 1575MHz
- High density applications
- Sat Navs
- Tracking Devices
- Alternative to larger PCB solution

### 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

#### Electrical Characteristics

Item	Spec		
Frequency Range	1570 ~ 1580MHz		
VSWR	3:0 : 1 max (Typ 1.0 to 2.2 : 1)		
Polarization	Linear		
Input Impedance [Ω]	50 Ohm		
Bandwidth (MHz)	10		
Matching Value of Antenna Matching Circuit (Direction, from Antenna to Module)	Antenna Matching Circuit	Series (Feeding)	1.0nH
		Series (Ground)	1.2nH
	π -Matching Circuit	Shunt1	3.0pF
		Series	4.7nH
	Shunt 2	N/C	
Directivity	Omni directional		
Gain [dBi]	Peak	Avg	Peak
	Azimuth	-2.75	0.85
	Elevation 1	-3.80	0.00
	Elevation 2	-3.92	2.46
	3D	-4.43	1.73

### PART IDENTIFICATION:

ACA-104-

#### Packaging

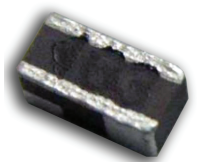
Blank: Bulk  
T: Tape and-Reel

# GPS Chip Antenna 1575.00MHz

**ACA-104-T**

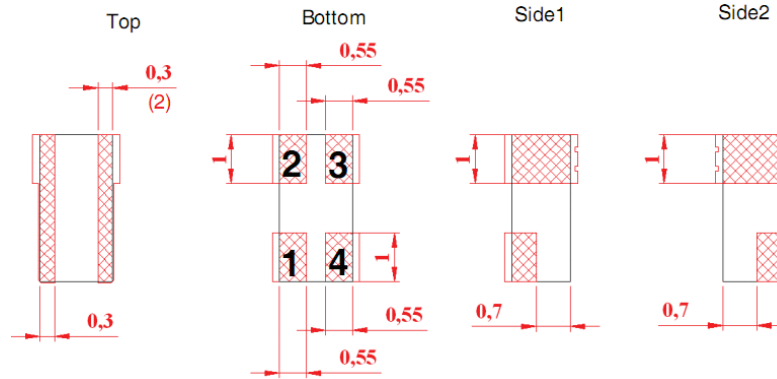


RoHS / RoHS II Compliant

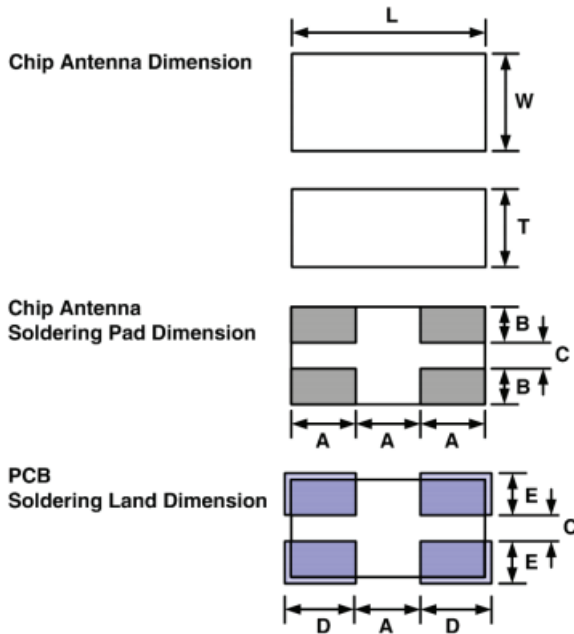


3.0 x 1.5 x 1.2 mm

## OUTLINE DIMENSIONS:



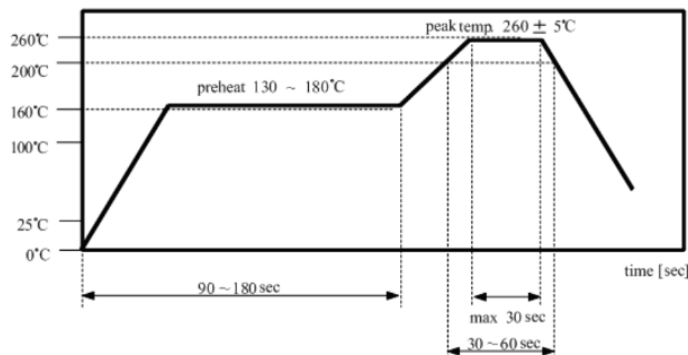
## Recommended Land Pattern



(Dimensions: mm)

Parameter	L	W	T	A	B	C	D	E
Value (mm)	3.0 ±0.1	1.5 ±0.1	1.2 ±0.1	1.0	0.55	0.4	1.1	0.65

## REFLOW PROFILE:

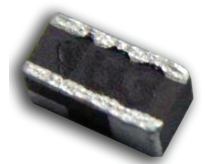


# GPS Chip Antenna 1575.00MHz

ACA-104-T



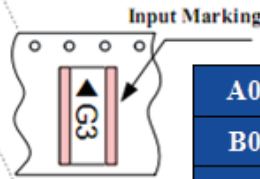
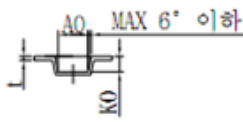
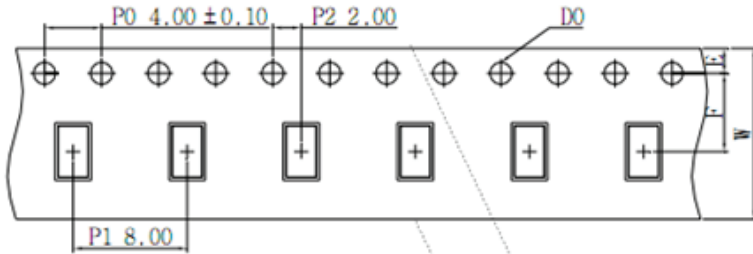
RoHS / RoHS II Compliant



3.0 x 1.5 x 1.2 mm

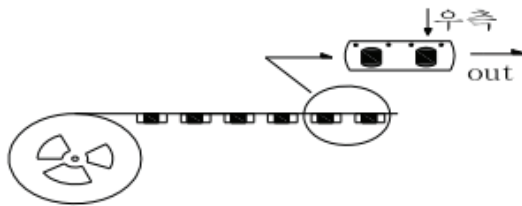
## TAPE & REEL:

**Packaging:** 1,000 Units Per Reel

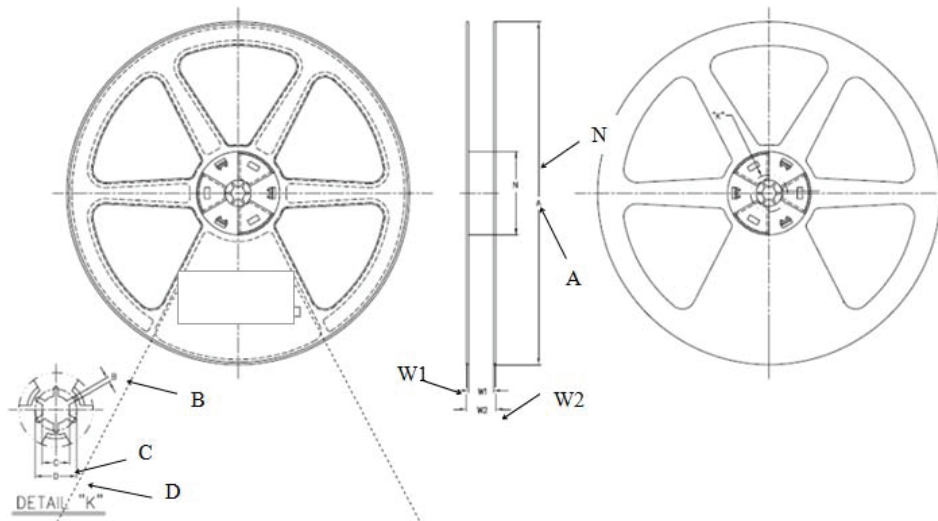


A0	1.95±0.10	E	1.75±0.10
B0	3.40±0.10	F	5.50±0.10
K0	1.40±0.05	t	0.30±0.05
D0	1.55±0.05	w	12.00±0.30

TAPING STYLE



## Reel Dimensions:



A	330+0.2/-2.0
B	1.5 min
C	13.0+0.5/-0
D	20.2 min
N	100+3.0/-0
W1	12.4+3.0/-0
W2	16.4+2.0/-0

(Dimensions: mm)

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