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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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3.0 x 1.5 x 1.2 mm

ACA-106-T



RoHS / RoHS II Compliant



Moisture Sensitivity Level (MSL) – MSL = 1

FEATURES:

- Chip Antenna covering BEIDOU & GPS & GNSS bands from 1555MHz to 1610MHz
- Matching via lumped elements with single footprint
- Constructed from solid dielectric ceramic material
- Suitable for RoHS compliant reflow
- Peak Gain 2.56 ~ 3.28dBi (dependant on band)
- Average Gain -1.59 ~ -0.83dBi (dependant on band)
- VSWR 3.0 : 1 max
- Size – 3.0 x 1.5 x 1.2mm (0.11 x 0.059 x 0.047 inch)
- Non Ground Mounting type
- Linear Polarization
- Matched to 50 Ohm.

APPLICATIONS:

- 1555 ~ 1565 MHz
 - Chinese BEIDOU band
 - 1.561098 GHz BEIDOU Band (B1)
- 1570 ~ 1580 MHz
 - GPS band
 - 1.57542 GHz GPS (L1 signal)
- 1565 ~ 1605 MHz
 - GPS and GNSS bands
 - 1.559 ~ 1.592 GHz GALILEO (E2-L1-E11)
 - 1.602 GHz GLONASS
- 1560 ~ 1610 MHz
 - BEIDOU, GPS and GNSS bands
 - 1.561098 GHz BEIDOU Band (B1)
 - 1.57542 GHz GPS (L1 signal)
 - 1.602 GHz GLONASS

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

3D Electrical Characteristics for BEIDOU band

ITEM		SPECIFICATION		
Frequency Range		1555 ~ 1565MHz		
VSWR		3: 1 Max		
Polarization		Linear		
Frequency [MHz]		1555	1560	1565
Gain [dBi]	Peak	4.01	3.85	3.75
	Average	-1.28	-1.32	-1.43
Efficiency [%]		74.65	73.95	72.11

3D Electrical Characteristics ACA-106-T for GPS band.

ITEM		SPECIFICATION		
Frequency Range		1570 ~ 1580MHz		
VSWR		3: 1 Max		
Polarization		Linear		
Frequency [MHz]		1570	1575	1580
Gain [dBi]	Peak	2.70	2.56	2.73
	Average	-0.73	-0.83	-0.62
Efficiency [%]		84.55	82.63	86.73





3.0 x 1.5 x 1.2 mm

ACA-106-T



RoHS / RoHS II Compliant



3D Electrical Characteristics for GPS & GNSS bands.

ITEM		SPECIFICATION				
Frequency Range		1565 ~ 1605MHz				
VSWR		3: 1 Max				
Polarization		Linear				
Frequency [MHz]		1565	1575	1585	1595	1605
Gain [dBi]	Peak	3.35	3.53	3.60	4.02	3.59
	Average	-1.49	-1.59	-1.59	-1.22	-1.68
Efficiency [%]		71.12	69.53	69.51	75.59	68.00

3D Electrical Characteristics for BEIDOU, GPS & GNSS bands.

ITEM		SPECIFICATION					
Frequency Range		1560 ~ 1610MHz					
VSWR		3: 1 Max					
Polarization		Linear					
Frequency [MHz]		1560	1562	1574	1576	1598	1606
Gain [dBi]	Peak	1.99	2.20	3.29	3.40	3.59	3.27
	Average	-2.54	-2.47	-1.61	-1.51	-1.37	-1.93
Efficiency [%]		55.77	56.76	69.18	70.80	73.07	64.22

PART IDENTIFICATION:

ACA-106-

Packaging

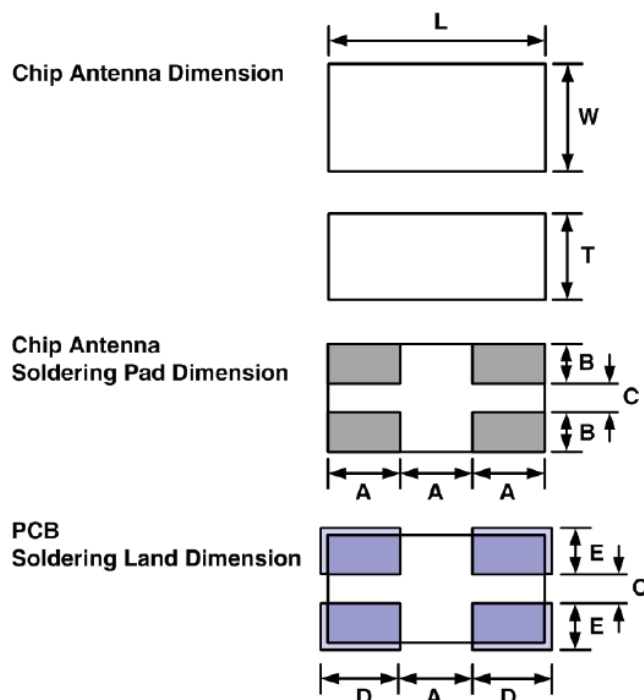
Blank: Bulk

T: Tape and Reel



3.0 x 1.5 x 1.2 mm

OUTLINE DIMENSIONS:

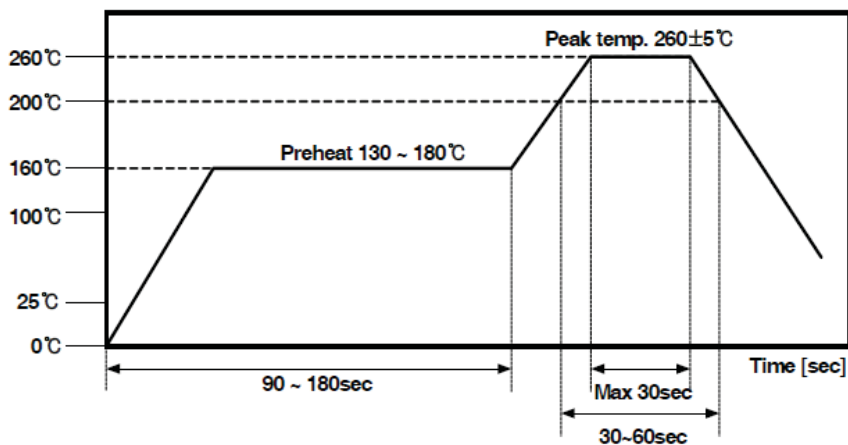


Parameter	L	W	T	A	B	C	D	E
Value [mm]	3.0±0.1	1.5±0.1	1.2±0.1	1.0	0.55	0.4	1.1	0.65

Unless Specified tolerances are ± 0.05 mm

(Dimensions: mm)

REFLOW PROFILE:



Manual Soldering

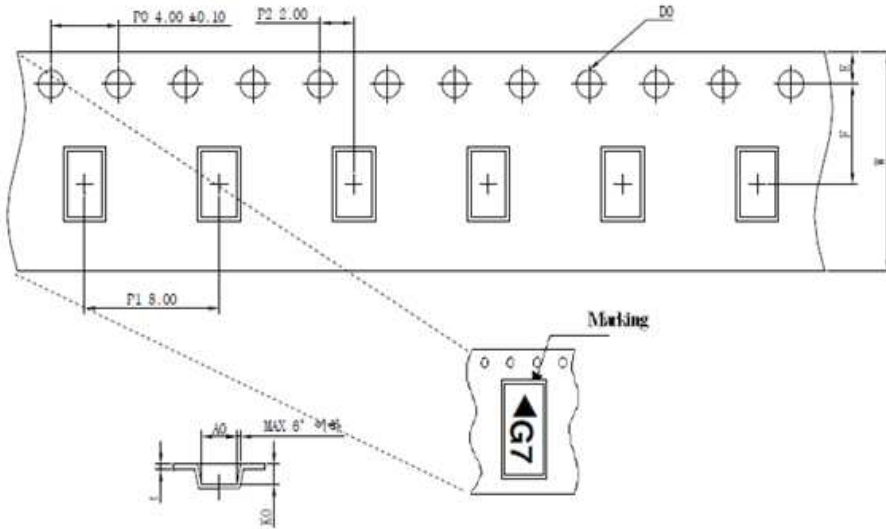
Manual Soldering	Condition
Pre-Heating Temperature	120 °C , 60 ~ 300 sec
Soldering Temperature	340°C ± 5°C , 5 sec max per each terminal



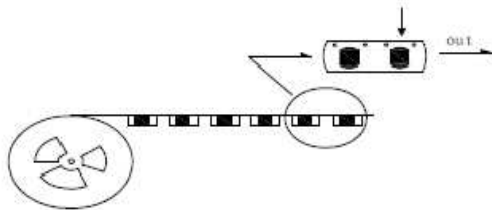
3.0 x 1.5 x 1.2 mm

TAPE & REEL:

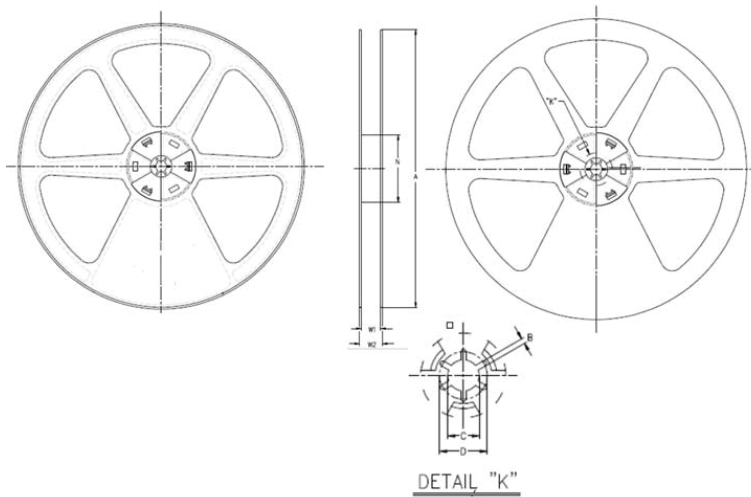
Packaging: 5,000 Units Per Reel



TAPE DIRECTION



A0	1.95±0.10	E	1.75±0.10
B0	3.40±0.10	F	5.50±0.10
K0	1.40±0.10	t	0.3±0.05
D0	1.55±0.50	w	12.00±0.30



Size	24mm Reel [mm]
A	330 +0.2 / -2.0
B	2.0 +0.5 / -0.2
C	13.0 +0.5 / -0.0
D	20.2 Min
N	80 +3.0 / -0.0
W1	12.4 +3.0 / -0.0
W2	16.4 +2.0 / -2.0

(Dimensions: mm)

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