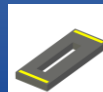


NFC Chip Antenna



AANI-CH-0030

Request Samples



Check Inventory



10 x 4 x 0.8 mm

RoHS/RoHS II Compliant

MSL Level = N/A

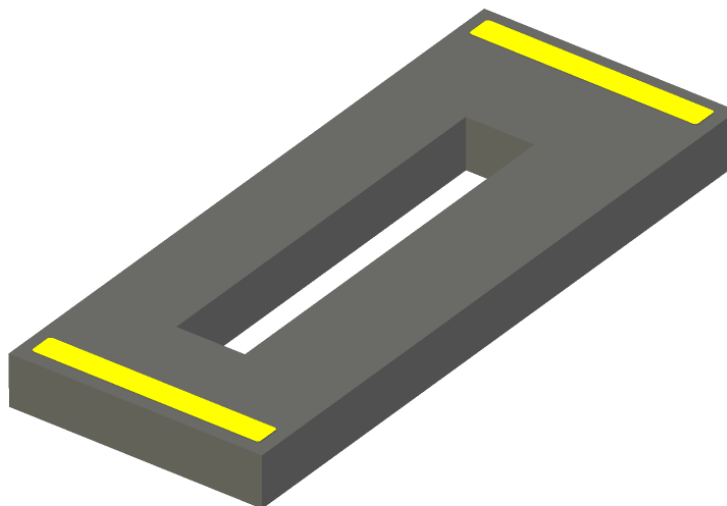
Features

- Compact Size: 10 x 4 x 0.8 mm
- Center Frequency: 13.56MHz
- Nominal Inductance: 0.298 uH
- Read Distance: 10 ~ 30 mm
- Fully SMD Compatible
- RoHS Compliant

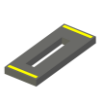
Applications

- RFID / NFC Systems
- Data Transfer and Pairing
- Access Control and Identification
- Payment, EMVCo
- Phones, Infotainment, POS Terminals

Product Image



NFC Chip Antenna



AANI-CH-0030

Request Samples



Check Inventory



10 x 4 x 0.8 mm

RoHS/RoHS II Compliant

MSL Level = N/A

Electrical Specification

Parameter	Specification	Unit
Operating Frequency	13.56	MHz
Bandwidth	1	MHz
VSWR (Typ.)	1.1	
Inductance	0.298	$\mu\text{H}@13.56\text{MHz}$
Q-Factor	15.7	
DC Resistance	1.62	$\Omega@13.56\text{MHz}$
Self-Resonance Frequency	375.78	MHz
Reading Distance	10~30	mm
Polarization	Linear	-
Impedance	50	Ω

Mechanical Specification

Parameter	Specification
Dimension	10 x 4 x 0.8 mm
Mounting Type	Surface Mount
Weight	0.05 g

Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +105°C
Storage Temperature	-40°C to +85°C
Humidity	85% R.H.
RoHS Compliance	Yes

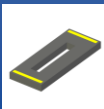


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NFC Chip Antenna



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Check Inventory

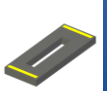


10 x 4 x 0.8 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Ordering Information

Part Number	Description
AANI-CH-0030	NFC Chip Antenna on Cut Tape
AANI-CH-0030-T	NFC Chip Antenna on Tape & Reel

NFC Chip Antenna



AANI-CH-0030

Request Samples



Check Inventory

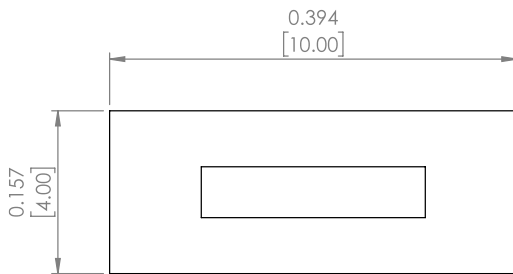


10 x 4 x 0.8 mm

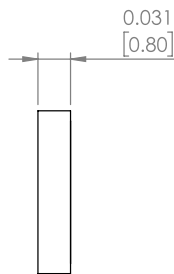
RoHS/RoHS II Compliant

MSL Level = N/A

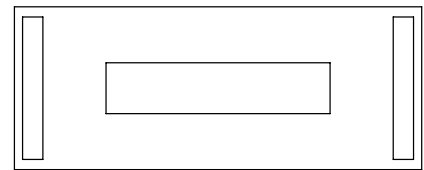
Product Dimensions



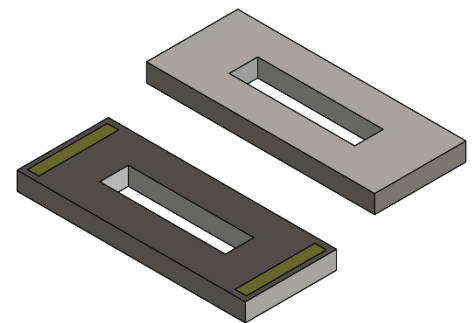
TOP VIEW



SIDE VIEW

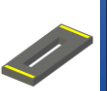


BOTTOM VIEW



Unit: Inches [mm]

NFC Chip Antenna



AANI-CH-0030

Request Samples



Check Inventory

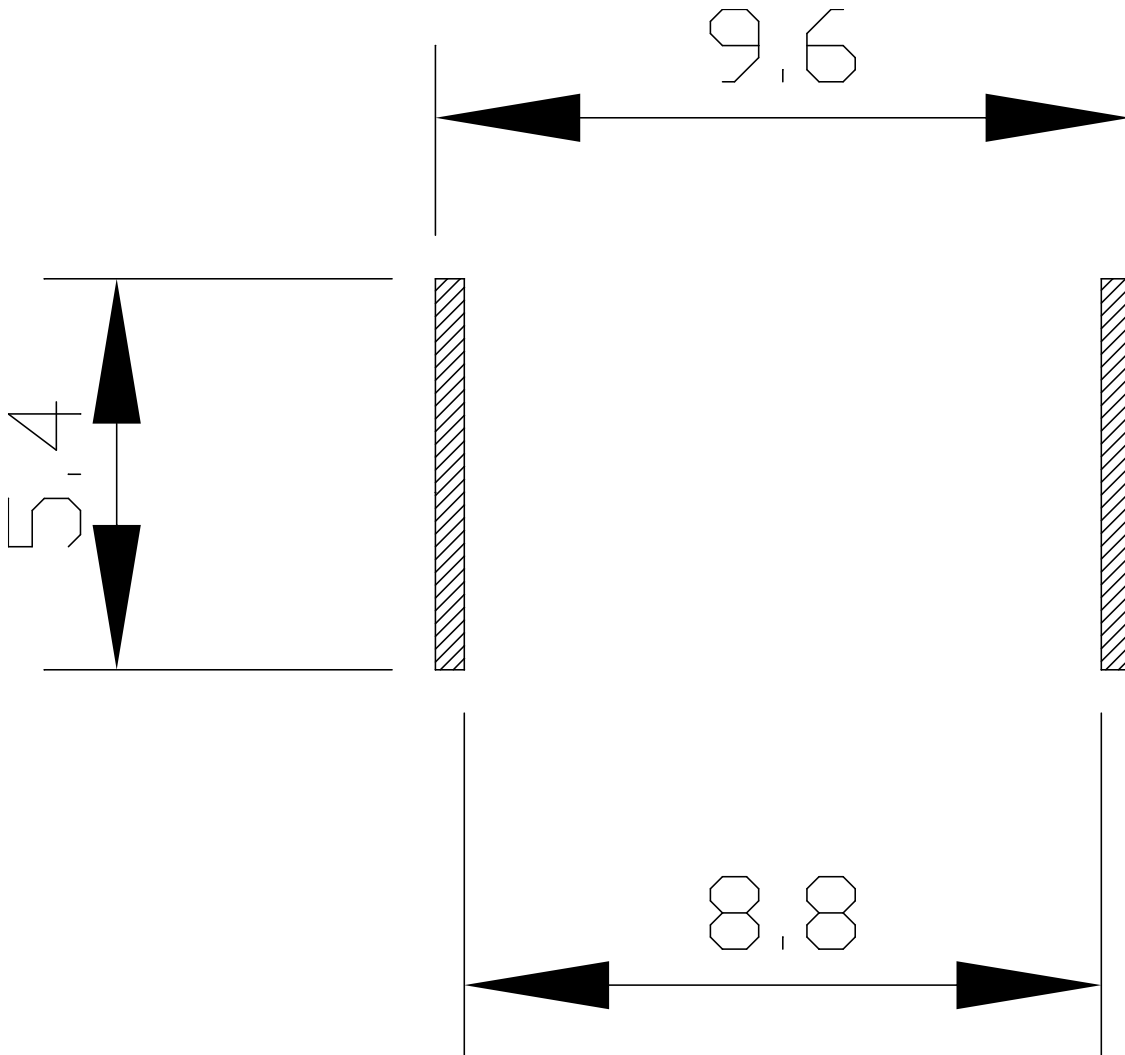


10 x 4 x 0.8 mm

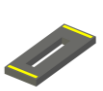
RoHS/RoHS II Compliant

MSL Level = N/A

Land Pattern



Unit: mm



AANI-CH-0030

Request Samples



Check Inventory



10 x 4 x 0.8 mm

RoHS/RoHS II Compliant

MSL Level = N/A

Reflow Profile [JEDEC J-STD-020]

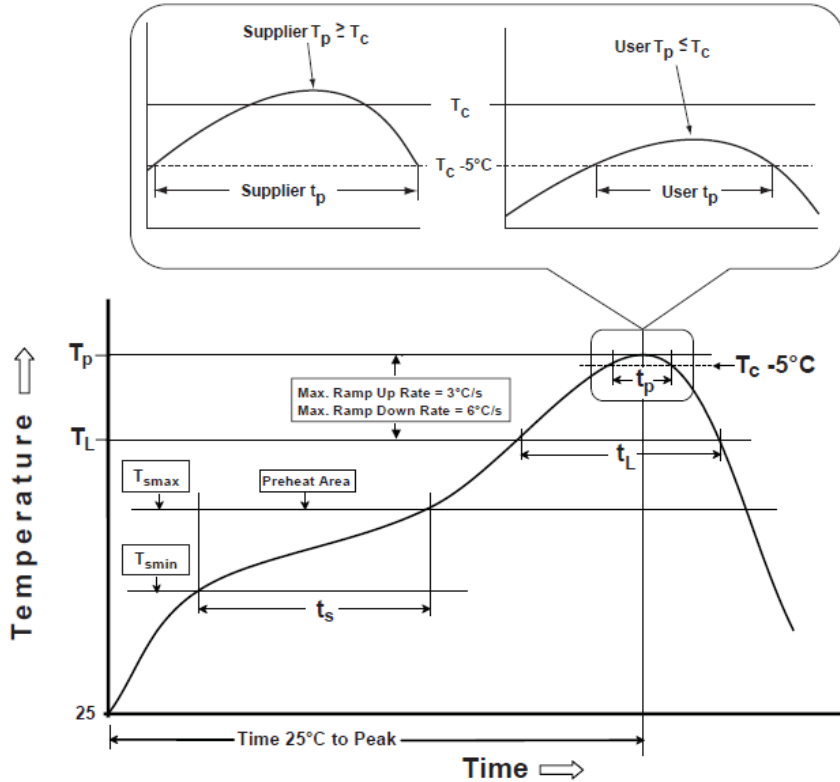


Table 1

SnPb Eutectic Process

Classification Temperatures (T_C)

Package Thickness	Volume mm ³ <350	Volume mm ³ ≥350
<2.5 mm	235 °C	220 °C
≥2.5 mm	220 °C	220 °C

Table 2

Pb-Free Process

Classification Temperatures (T_C)

Package Thickness	Volume mm ³ <350	Volume mm ³ 350-2000	Volume mm ³ >2000
<1.6 mm	260 °C	260 °C	260 °C
1.6 mm - 2.5 mm	260 °C	250 °C	245 °C
>2.5 mm	250 °C	245 °C	245 °C

Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
Preheat / soak		
Temperature minimum (T_{smin})	100°C	150°C
Temperature maximum (T_{smax})	150°C	200°C
Time (T_{smin} to T_{smax}) (t_s)	60 - 120 sec.	60 - 120 sec.
Average ramp-up rate (T_{smax} to T_p)	3°C/sec. max	3°C/sec. max
Liquidous temperature (T_L)	183°C	217°C
Time at liquidous (t_L)	60 - 150 sec.	60 - 150 sec.
Peak package body temperature (T_p)*	see Table 1	see Table 2
Time (t_p)* within 5°C of the specified classification temperature (T_C)	20 sec.	30 sec.
Ramp-down rate (T_p to T_{smax})	6°C/sec. max	6°C/sec. max
Time 25°C to peak temperature	6 min. max	8 min. max
Reflow cycles	2 max	2 max

*Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

**Tolerance for time at peak profile temperature (t_p) is defined as supplier minimum and a user maximum.



AANI-CH-0030

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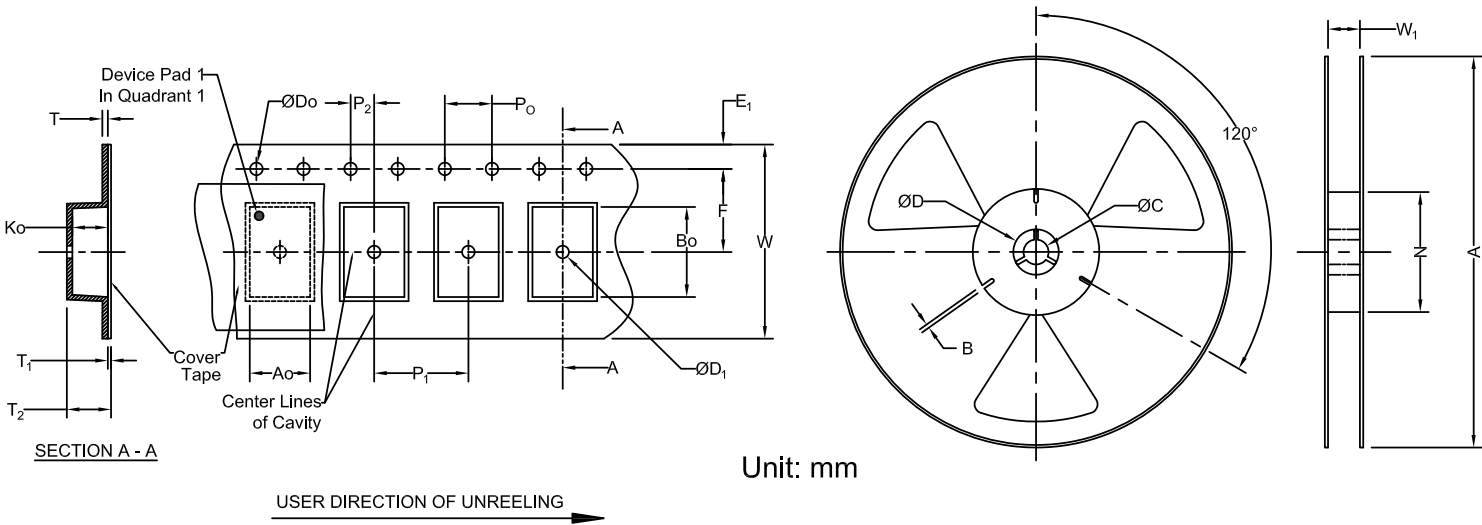


10 x 4 x 0.8 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Packaging

Tape & Reel

1. Tape & Reel Dimension



Carrier Tape Specifications (mm)

E1	D0	P0	P2	K0	P1	W	A0	B0	Reel Qty
1.75	1.5	4.0	2.0	1.3	8.0	16	4.3	10.3	2,000

Reel Specifications (mm)

A	W ₁	N
330	17	100

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