

# Surface Mount WLAN Antenna (3010MHz)

AMCA81-3R010G-S1F-T



RoHS / RoHS II Compliant



8.0 x 1.0 x 1.0mm

Moisture Sensitivity Level (MSL) – MSL = 1

## FEATURES:

- 3010MHz, Bandwidth  $\geq 200$ MHz
- Suitable for RoHS compliant reflow
- Gain 2.0dBi (Peak) / 0.5dBi (Average)
- VSWR  $< 2:1$
- Small size – 8.0 x 1.0 x 1.0mm (0.315 x 0.030 x 0.039 inch)
- Non Ground Mounting type.
- Power Handling 3W Max
- Matched to 50 Ohm

## APPLICATIONS:

- Wireless application - LTE Band 42, and WiMax bands.
- User Equipments (UE), e.g. dongles, modems
- User Equipments (EU) covering 3010MHz LTE TDD (Band 42)
- Alternative to larger PCB solution

## STANDARD SPECIFICATIONS

### Maximum Ratings

Item	Value
Operating Temperature Range	-40°C to + 85°C
Storage Temperature Range	-10°C ~ +40 and RH °C 70% (Max.)

### Electrical Characteristics

Item	Spec
Frequency	3010MHz
Bandwidth	$\geq 200$ MHz
Peak Gain	2.0 dBi typ.
Average Gain	0.5 dBi typ
VSWR	$< 2:1$
Impedance	50 Ohm
Power Capability	3W max

## PART IDENTIFICATION:

**AMCA81-3R010G-S1F-T**

### Packaging

Blank: Bulk or Cut Tape

T: T/R 1000pcs per reel

T4 : T/R 4000pcs per reel

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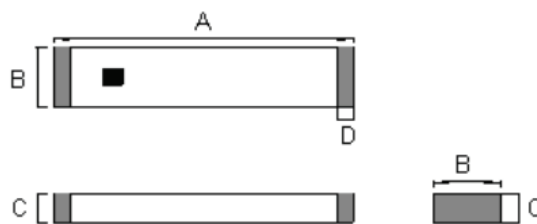
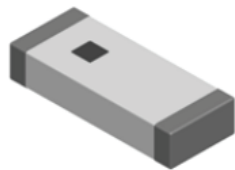


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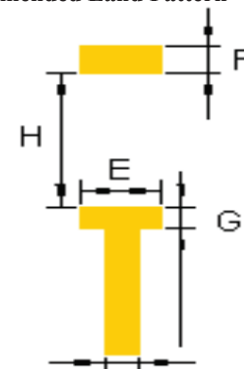


8.0 x 1.0 x 1.0mm

## OUTLINE DIMENSIONS:



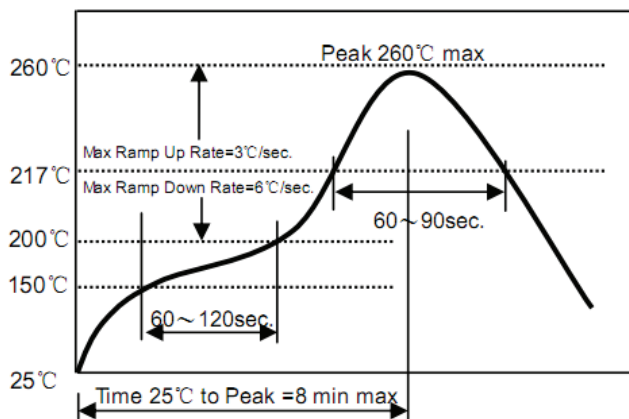
### Recommended Land Pattern



(Dimensions: mm)

Series	A	B	C	D	E	F	G	H	I
AMCA81	8.0±0.2	1.0±0.2	1.0±0.2	0.5±0.2	1.5±0.2	1.5±0.2	1.0±0.2	7.0±0.2	1.4±0.2

## REFLOW PROFILE:

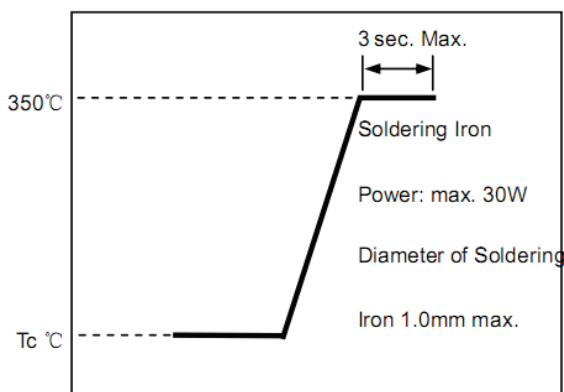


- Preheat condition: 150 ~200 /60~120°C sec.
- Allowed time above 217°C: 60~90sec.
- Max temp: 260°C
- Max time at max temp: 10sec.
- Solder paste: Sn/3.0Ag/0.5Cu
- Allowed Reflow time: 2x max

[Note: The reflow profile in the above table is only for qualification and is not meant to specify board assembly profiles. Actual board assembly profiles must be based on the customer's specific board design, solder paste and process, and should not exceed the parameters as the Reflow profile shows.]

## MANUAL SOLDERING

Pre-heating Temperature: 120°C, 60°C ~ 300 sec.



- Iron soldering power: Max.30W.
- Pre-heating: 150 / 60 sec. °C.
- Soldering Tip temperature: 350 Max. °C.
- Soldering time: 3 sec Max.
- Solder paste: Sn/3.0Ag/0.5Cu.
- Max 1 times for iron soldering.
- Soldering Temperature: 340°C±5°C, 5sec max per each terminal.

[Note: Take care not to apply the tip of the soldering iron to the terminal electrodes.]

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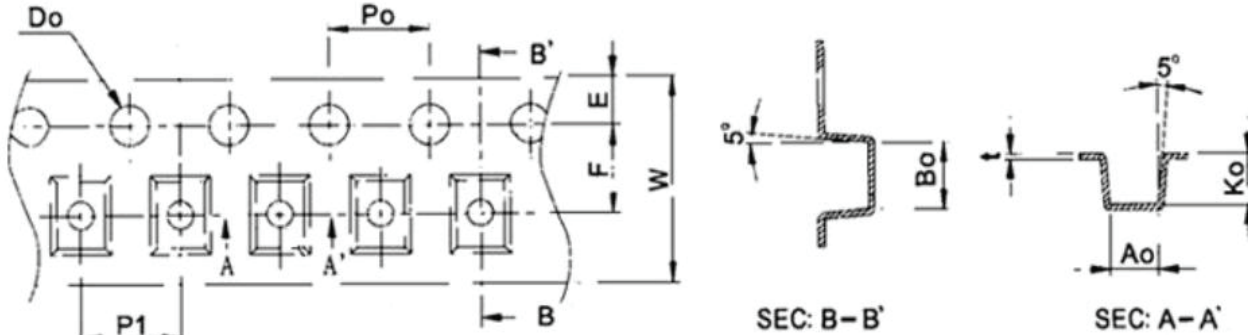
 RoHS / RoHS II Compliant



8.0 x 1.0 x 1.0mm

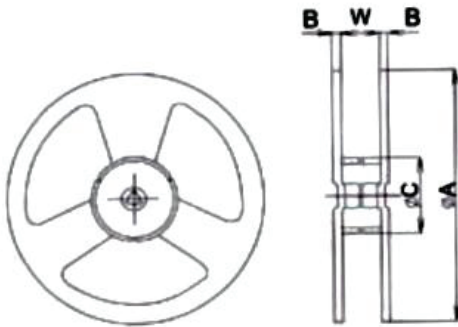
## TAPE & REEL:

**Packaging:** 1000 or 4000 Units per reel, please specify when ordering. 1000pcs MOQ.



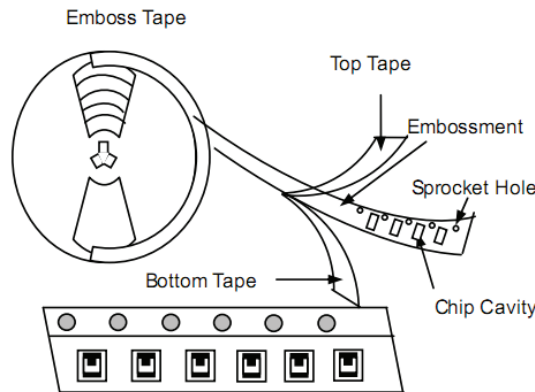
W	16.0±0.10	D0	1.50 +0.10 / - 0.0
P1	8.0±0.10	P0	4.0±0.10
E	1.75±0.10	K0	1.40±0.10
F	7.50±0.15	A0	2.30±0.10
B0	7.50±0.10	t	0.3±0.05

## Reel Dimensions



Type	Spec	Dimensions (mm)			
		A	W	C	B
AMCA81	13"*16mm	330±1	16.5±0.2	100±0.5	2.3±0.2

## Mounting Direction of Tape on Reel



Note: The sprocket holes are to the right as the tape is pulled toward the user.

(Dimensions: mm)

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