DATASHEET

KEY DATA

Chip: UCODE 7
Antenna Size: 9.8 × 5.8 mm
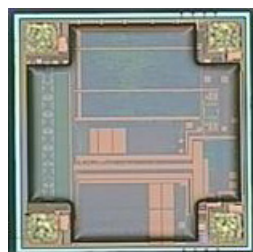Format: Dry Inlay, Wet Inlay, White Paper

RS-HY1006U7-2

APPLICATION

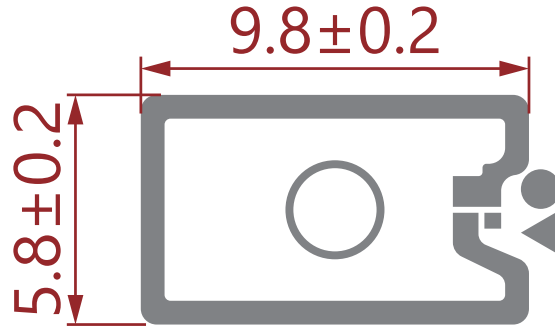Supply Chain & Logistics Management
Warehouse Management

OVERVIEW

RS-HY1006U7-2 UHF RFID Dry Inlay is built with NXP UCODE 7.

The U7 IC is the leading-edge EPC Gen2 RFID chip that offers best-in-classperformance and features for use in the most demanding RFID tagging applications. Particularly well suited for inventory management application, like e.g Retail and Fashion,with its leading edge RF performance for any given form factor, UCODE 7 enableslong read distance and fast inventory of dense RFID tag population. With its broadbanddesign, it offers the possibility to manufacture true global RFID label with best-in-classperformance over worldwide regulations.
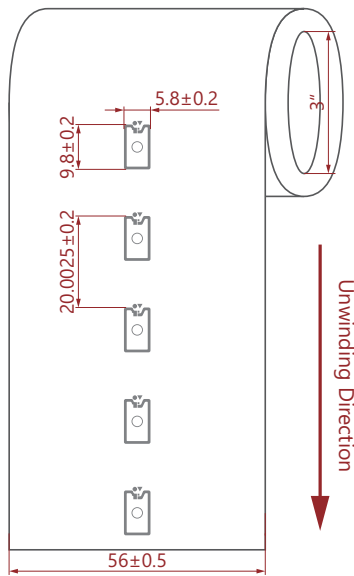
DATASHEET

DIMENSIONS

9.8±0.2

5.8±0.2

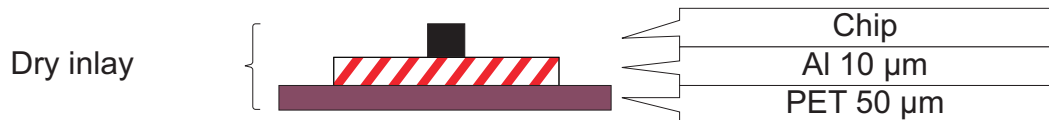## ORIENTATION

5.8±0.2

9.8±0.2

20.0025±0.2

3"

Unwinding Direction

56±0.5

Physical characteristics	Dimensions
Antenna size	9.8 × 5.8 mm
Inlay pitch	20.0025 mm
PET width	56 mm
Dry Inlay thickness	Al 10 μm + PET 50 μm
Reel detail	Web width: 56 ± 1.0 mm Inner core diameter: 3" (76.2 mm) Core thickness: 5 ± 2 mm

STRUCTURE

Dry inlay

Chip
Al 10 μm
PET 50 μm

HY-Link

RAIN® R F I D

DATASHEET

ELECTRICAL CHARACTERISTICS

Item		Description
Manufacture/IC		NXP UCODE 7
Base Material		PET
Antenna		Etched Al (10 μm) + PET (50 μm)
Protocol		RAIN RFID / ISO 18000-6C and EPC global Gen2v2 Compliant
Memory	User	None
	TID	48 bits
	EPC	128 bits
	Password	Kill Password - 32 bits
		Access Password - 32 bits
Frequency		860 ~ 960 MHz Sensitivity of 920MHZ band -1.5 ± 1dbm
Operating Mode		Passive
IC Life		100,000 Programming cycles, 50years data retention
ESD Voltage Immunity		Max. 2000 V

ENVIRONMENTAL REQUIREMENT

• Operating Temperature/Humidity: -5℃ ~ 60℃ / 20% ~ 80% RH

• Storage Temperature/Humidity: 20℃ ~ 30℃ / 20% ~ 60% RH

• Shelf Life: From the date of manufacture, 1 year in anti-static bag at 20℃ ~ 30℃ / 20% ~ 60% RH, and avoid direct sunlight exposure

PACKAGING

Reference Packing: Static-free bag with zipper; 8000 ± 100 Pcs/roll, 4 rolls/ctn (Actual Qty as per Shipping Mark).