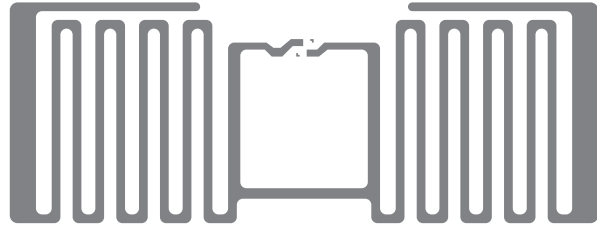


KEY DATA

Chip: Higgs-3
Antenna Size: 40 × 15 mm
Format: Dry Inlay, Wet Inlay,
White Paper

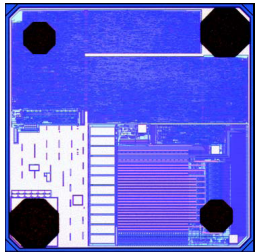


RS-HY4015H3-2

APPLICATION

Logistics Clothing
Supply Chain Management
Product Authentication

OVERVIEW



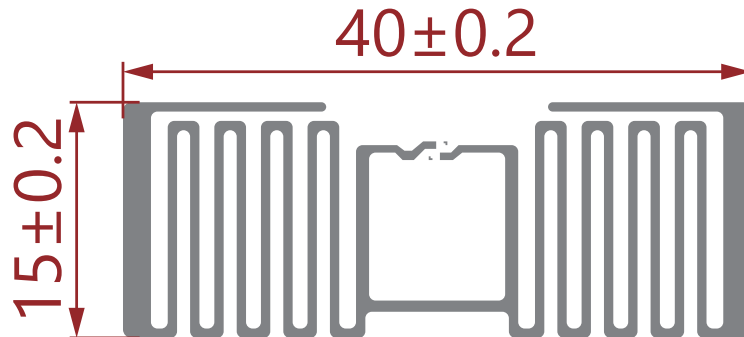
RS-HY4015H3-2 UHF RFID Dry Inlay is built with Alien Higgs-3.

Higgs-3 operates at extremely low power levels, yet still provides sufficient backscatter signal to read tags at an extended range. It can also be programmed at low RF power and, in conjunction with a custom command - LoadImage - can be programmed at high speed. Higgs-3 is implemented in a low cost CMOS process and uses proven and cost effective EEPROM technology.

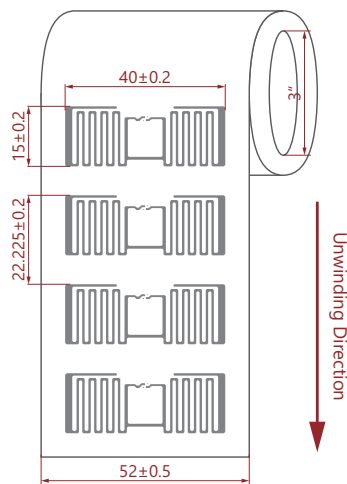
Higgs-3 offers a flexible memory architecture that provides for the optimum allocation of EPC and User memory for different use cases such as legacy part numbering systems and service history. User memory can also be read and or write locked on 64-bit boundaries, supporting a variety of of public/private usage models.

The IC also features a factory programmed 64-bit serial number that cannot be altered. In conjunction with the EPC code, this provides a unique "fingerprint" for the tagged item.

DIMENSIONS



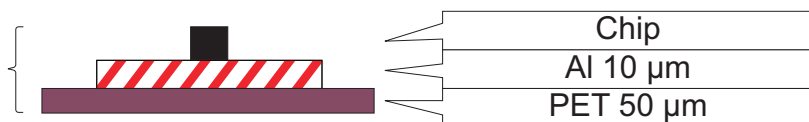
ORIENTATION



Physical characteristics	Dimensions
Antenna size	40 × 15 mm
Inlay pitch	22.225 mm
PET width	52 mm
Dry Inlay thickness	Al 10 μm + PET 50 μm
Reel detail	Web width: 52 ± 1.0 mm Inner core diameter: 3" (76.2 mm) Core thickness: 5 ± 2 mm

STRUCTURE

Dry inlay



ELECTRICAL CHARACTERISTICS

Item		Description
Manufacture/IC		Alien Higgs-3
Base Material		PET
Antenna		Etched Al (10 μm) + PET (50 μm)
Protocol		ISO/IEC 18000-6C / EPC global Class 1 Gen 2
Memory	EPC	96 ~ 480 bits
	User	512 bits
	TID	64 bits
	Reserved	Kill Password - 32 bits Access Password - 32 bits
Frequency		860 ~ 960 MHz Sensitivity of 920 MHz band -13.7 ± 3 dBm
Operating Mode		Passive
IC Life		100,000 Programming cycles, 50years data retention
ESD Voltage Immunity		Max. 2000 V

ENVIRONMENTAL REQUIREMENT

- Operating Temperature/Humidity: $-5^{\circ}\text{C} \sim 60^{\circ}\text{C}$ / 20% ~ 80% RH
- Storage Temperature/Humidity: $20^{\circ}\text{C} \sim 30^{\circ}\text{C}$ / 20% ~ 60% RH
- Shelf Life: From the date of manufacture, 1 year in anti-static bag at $20^{\circ}\text{C} \sim 30^{\circ}\text{C}$ / 20% ~ 60% RH, and avoid direct sunlight exposure

PACKAGING

Reference Packing: Static-free bag with zipper; 7000 ± 100 Pcs/roll, 8 rolls/ctn (Actual Qty as per Shipping Mark).

