

KEY DATA

Chip: Higgs-3
Antenna Size: 94.8 × 8.2 mm
Format: Dry Inlay, Wet Inlay,
White Paper



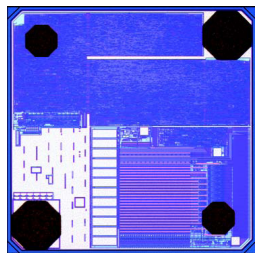
RS-HYA-9640H3-3

APPLICATION

Logistics Clothing
Supply Chain Management
Product Authentication



OVERVIEW



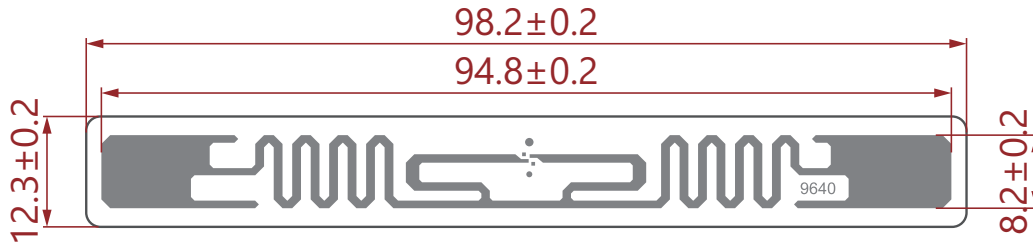
RS-HYA-9640H3-3 UHF RFID Label is built with Alien Higgs-3.

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.

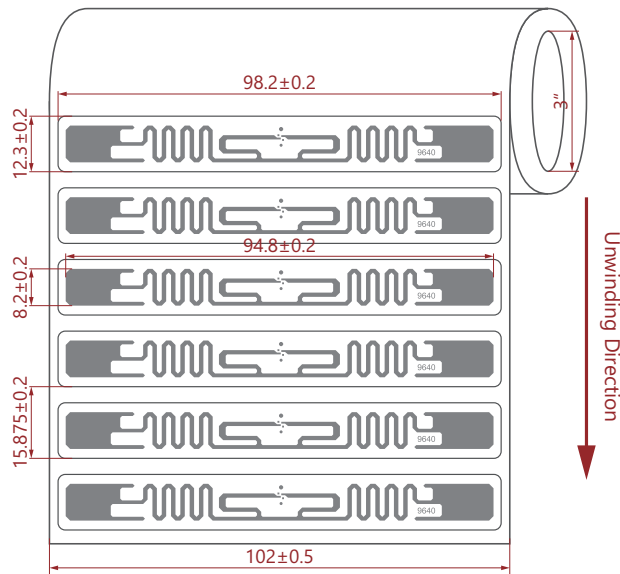
Higgs-3 offers a flexible memory architecture that provides for the optimum allocation of EPC and User memory for different use cases such as legacy part numbering systems and service history. User memory can also be read and or write locked on 64-bit boundaries, supporting a variety of of public/private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

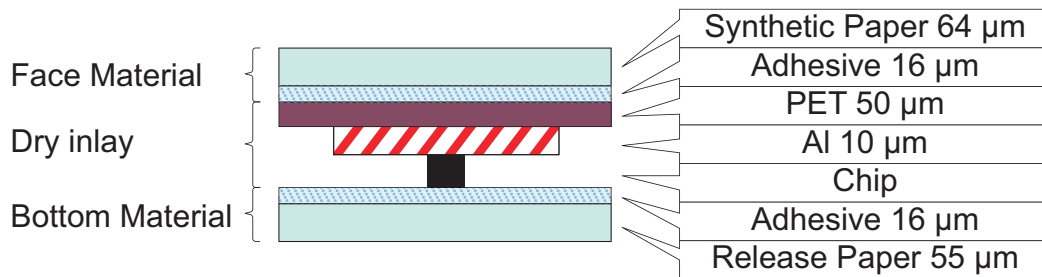


ORIENTATION



Physical characteristics	Dimensions
Antenna size	94.8 × 8.2 mm
Label size	98.2 × 12.3 mm
Label pitch	15.875 mm
Release paper width	102 mm
Reel detail	Web width: 102 ± 1.0 mm Inner core diameter: 3" (76.2 mm) Core thickness: 5 ± 2 mm

STRUCTURE



ELECTRICAL CHARACTERISTICS

Item		Description
Manufacture/IC		Alien Higgs-3
Face Material		AW5200 / 64 μm 80 g/m ² Coated Paper
Bottom Material		AWS915 / 55 μm 62 g/m ² Release Paper
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
Operating Mode		Passive
IC Life		100,000 Programming cycles, 50years data retention
ESD Voltage Immunity		Max. 2000 V

ENVIRONMENTAL REQUIREMENT

- Adhesive Application Temperature/Humidity: 10°C ~ 40°C / 20% ~ 80% RH
- Operating Temperature/Humidity: -5°C ~ 60°C / 20% ~ 80% RH
- Storage Temperature/Humidity: 20°C ~ 30°C / 20% ~ 60% RH
- Shelf Life: From the date of manufacture, 1 year in anti-static bag at 20°C ~ 30°C / 20% ~ 60% RH, and avoid direct sunlight exposure

PACKAGING

Reference Packing: Static-free bag with zipper; 5000 \pm 100 Pcs/roll, 4 rolls/ctn (Actual Qty as per Shipping Mark).

