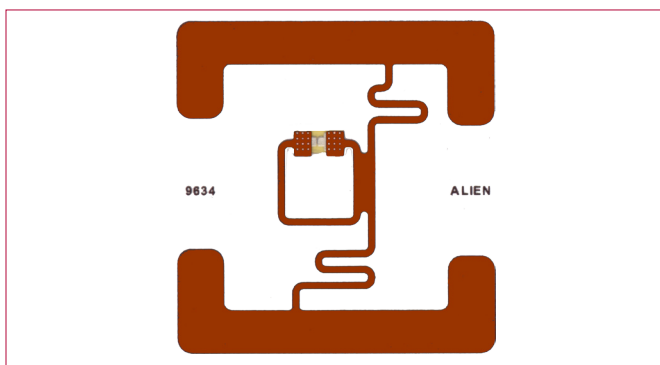




ALN-9634 TIE Inlay

The Alien Technology® ALN-9634 TIE Inlay is a general purpose RFID inlay optimized for use in item level tagging applications such as apparel and baggage.

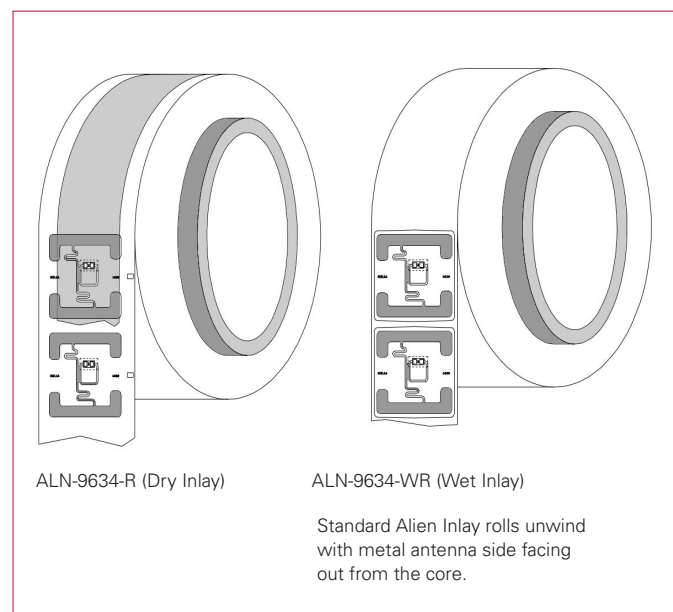


Features

- › Meets EPCglobal Gen 2 (v 1.2.0) as well as ISO/IEC 18000-6C
- › Worldwide operation in the RFID UHF Bands (860-960Mhz)
- › Higgs™-3 IC with 800-bits of NonVolatile Memory
 - 96 EPC bits, extensible to 480-bits
 - 512 User bits
 - 64-bit Unique TID
 - 32-bit Access and 32-bit Kill passwords
- › Pre-programmed with a unique, unalterable 64-bit serial number
- › User Memory can be Block Perma-Locked as well as read password protected in 64-bit blocks
- › Supports all Mandatory and Optional Gen 2 Commands including Item Level
- › Custom Command for high speed programming
- › Exceptional Operating Range
- › Available in high-yield, high-capacity rolls for high-volume converting processes

Based on Alien's advanced Higgs™-3 UHF RFID IC and a high-performance antenna design, the ALN-9634 inlay delivers industry leading EPC Gen 2 range and reliability at competitive prices. The ALN-9634 is also globally compliant, enabling labels that operate consistently across the diverse frequencies of the Americas, Europe, Middle East, Asia, and Africa.

The ALN-9634 is the latest addition to Alien's growing portfolio of Higgs-3 powered UHF RFID inlays. Other members include: the Squiggle inlay (ALN-9640), Alien's iconic industry best general purpose inlay for use in pallet and case tagging applications; the G inlay (ALN-9654) for high-performance on glass and plastics; and the Squiggle-SH (ALN-9662), which complements the Squiggle by delivering similar performance in a 3" label. All members of the family are manufactured using Alien's patented Fluidic Self Assembly (FSA™) process, which delivers high inlay volumes at low unit costs.



ALN-9634-R (Dry Inlay)

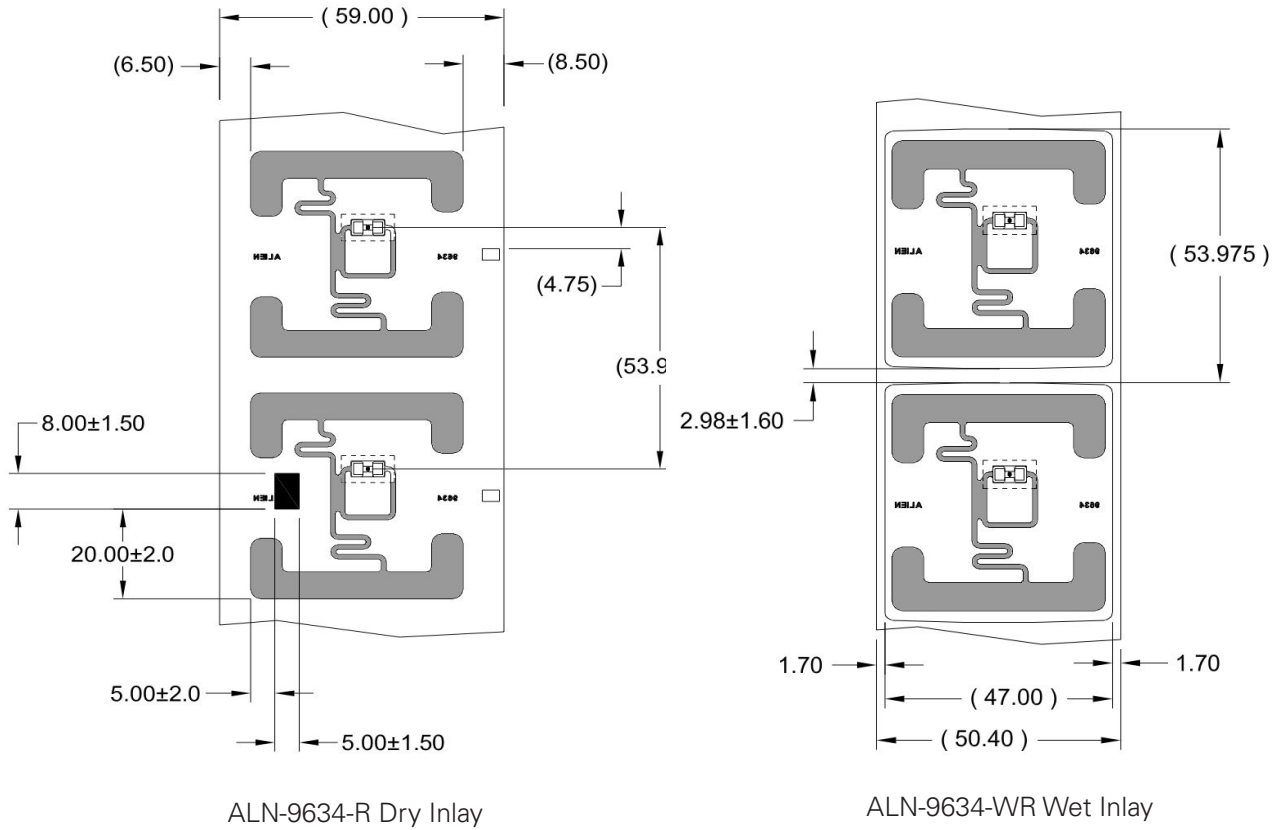
ALN-9634-WR (Wet Inlay)

Standard Alien Inlay rolls unwind with metal antenna side facing out from the core.



ALN-9634 TIE Inlay

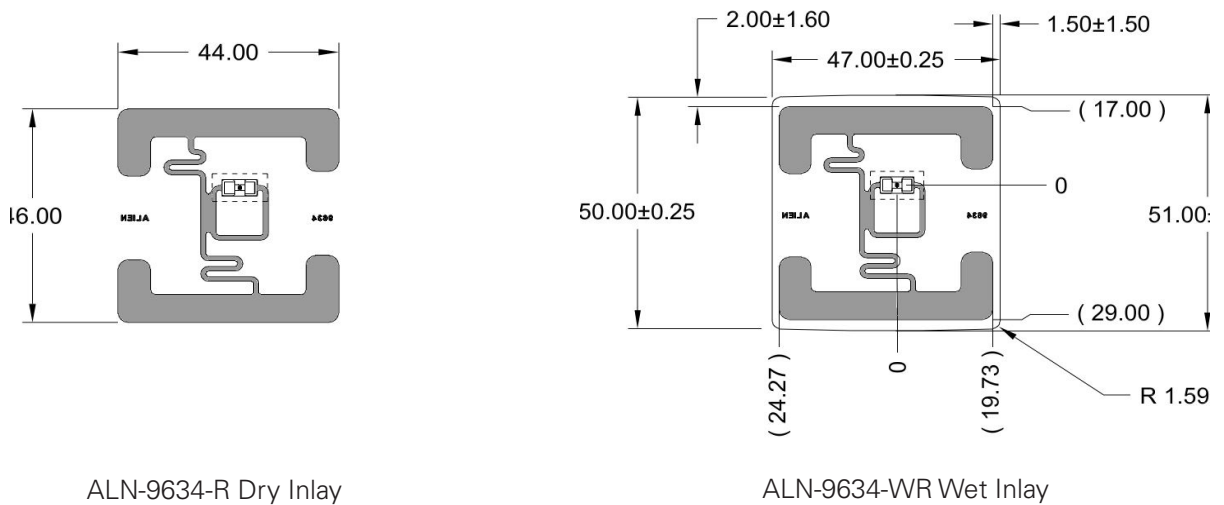
ALN-9634 Inlay Physical Dimensions



ALN-9634-R Dry Inlay

ALN-9634-WR Wet Inlay

ALN-9634 Inlay General Dimensions

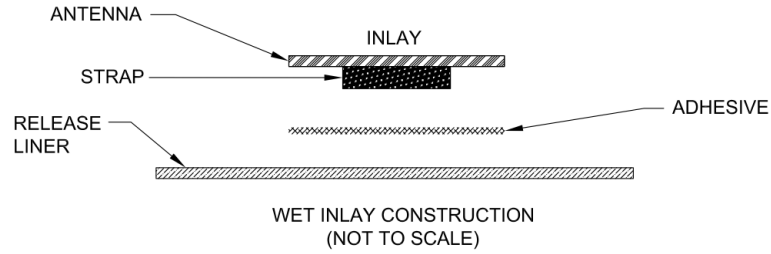


ALN-9634-R Dry Inlay

ALN-9634-WR Wet Inlay

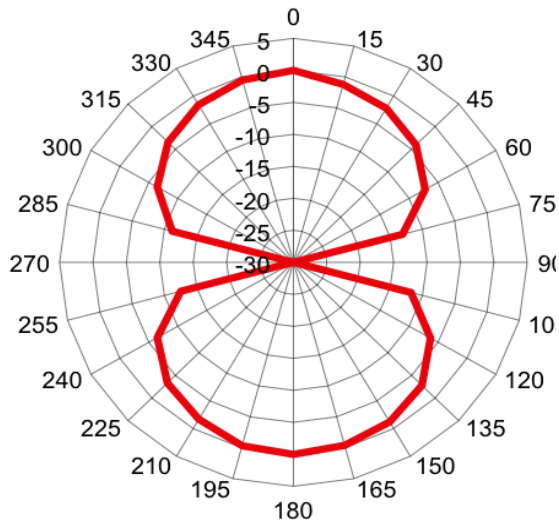


ALN-9634 Wet Inlay Construction

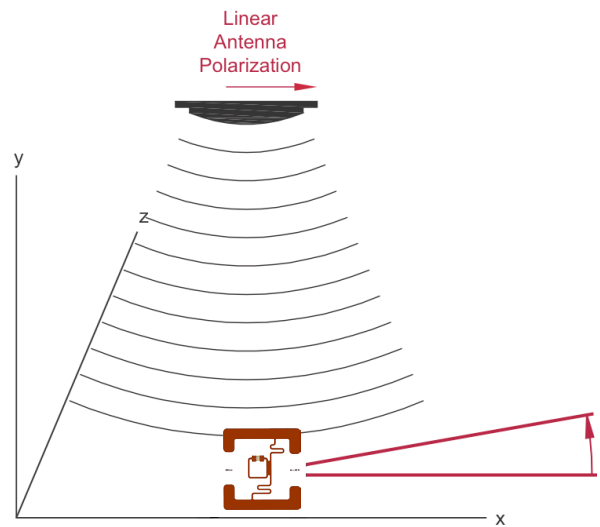


ALN-9634 Inlay Sensitivity & Orientation

World Tag Angular Sensitivity
(dB vs. Angle Position)

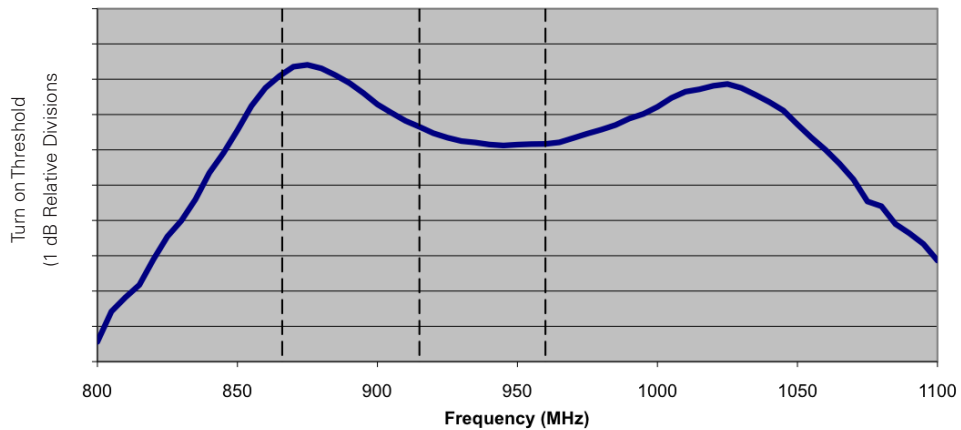


World Tag Relative Orientation
Tag is rotated in the x, y, plane about the z axis



On-Product Performance Information

Frequency Response in Air





ALN-9634 TIE Inlay

ALN-9634 Specifications

Dry Inlay

Antenna Width	44.0mm
Antenna Length	46.0mm
Web Width	59.0mm
Web Pitch	53.975mm
Core Width	57.1mm
Core ID	152.4mm
Core Material	Fiberboard
Interleaf Material	Paper
Interleaf Width	38.1mm
Inlays per Roll	10,000 Nominal
Roll OD	< 406.4mm Nominal
Roll Labeling Data	Roll #, Quantity

Wet Inlay

Inlay Width	47.0mm
Inlay Length	51.0mm
Web Width	50.4mm
Web Pitch	53.975mm
Core Width	57.1mm
Core ID	152.4mm
Core Material	Fiberboard
Inlays per Roll	10,000 Nominal
Maximum Roll OD	< 406.4mm
Roll Labeling Data	Roll #, Quantity
Inlay Adhesive	Fasson S490
Adhesive Application Temperature	> +2°C
Adhesive Service Temperature	-20°C to +93°C
Release Liner	40# SCK

Environmental

Shelf Life	2 Years
Recommended Storage	+25°C / 40% RH
Storage Limits	-25°C to +50°C 20% to 90% RH Non-condensing
Operating Limits	-40°C to +70°C 20% to 90% RH Non-condensing
Bend Diameter	> 50mm
Pressure	< 5N/mm ²
Drop Resistance	Per ASTM D5276
Write Cycles	100,000 @ 25°C
RoHs	2002/95/EC Compliant
ESD – HBM / CDM	> 5.0kV / > 1.5kV

RFID

ISO/IEC 18000-6C	
EPC Class 1 Gen 2	
Integrated Circuit	Alien Higgs-3
EPCglobal Certificate	9501101260000001084
Operating Frequency	840–960 MHz
EPC Size	96–480 Bits
User Memory	512 Bits
Unique TID	64 Bits
Access Password	32 Bits
Kill Password	32 Bits

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