



ALN-9534 2x2 Inlay

The Alien Technology® ALN-9534 2x2 Inlays are general purpose RFID inlays optimized for use in item level tagging applications such as apparel and baggage.

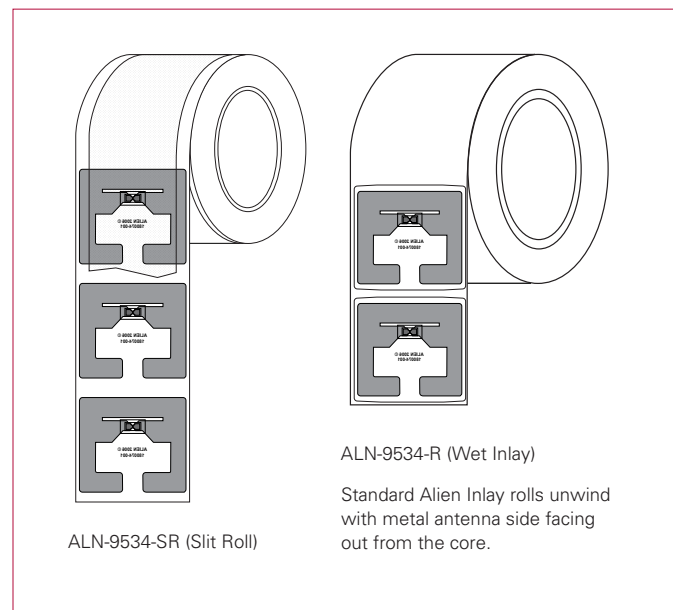


Features

- › EPC Class 1 Gen 2 / ISO 18000-6C
- › Exceptional omni-directional range
- › High-speed programming for seamless manufacturing integration
- › Operates at global frequencies (860-960MHz)
- › Available in high-yield, high-capacity rolls for high-volume converting processes
- › Alien Higgs™-2 IC

Based on Alien's break through Higgs-2 UHF RFID IC and a high-performance omni-directional antenna design, the ALN-9534 inlay delivers industry leading EPC Gen 2 range and reliability at competitive prices. ALN-9534 inlays are also global inlay compliant, enabling inlays that operate consistently across the diverse frequencies of the Americas, Europe, Middle East, Asia, and Africa.

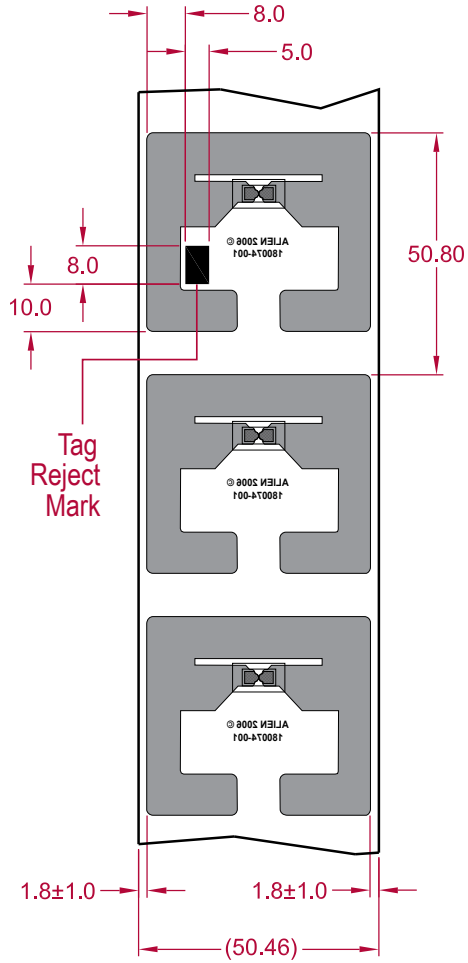
The ALN-9534 offers the best item level performance in Alien's portfolio of Higgs-2 powered UHF RFID inlays. Other members include: the Squiggle inlay (ALN-9534), Alien's iconic industry best general purpose inlay for use in pallet and case tagging applications; the M inlay (ALN-9554) for high-performance on plastics; the Squiggle-SH (ALN-9562), which complements the Squiggle by delivering similar performance in a 3" label size; and the Squiggle-SQ inlay (ALN-9529) for small item inlays. 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.



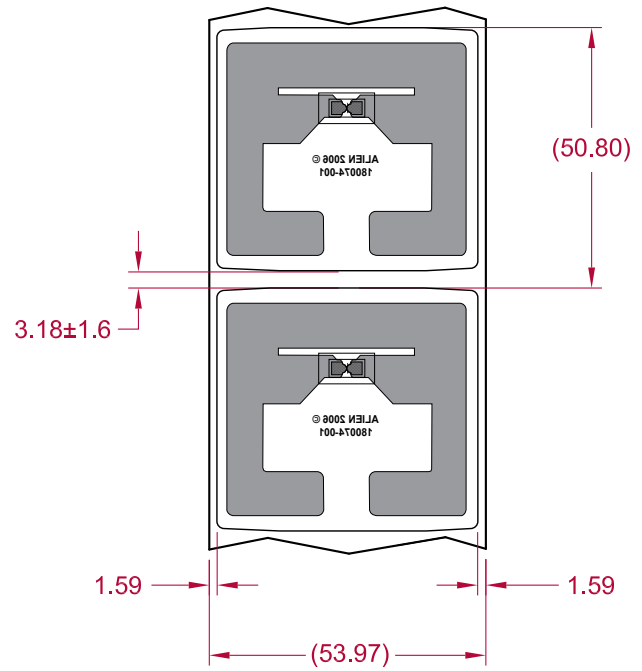


ALN-9534 2x2 Inlay

ALN-9534 Inlay Physical Dimensions

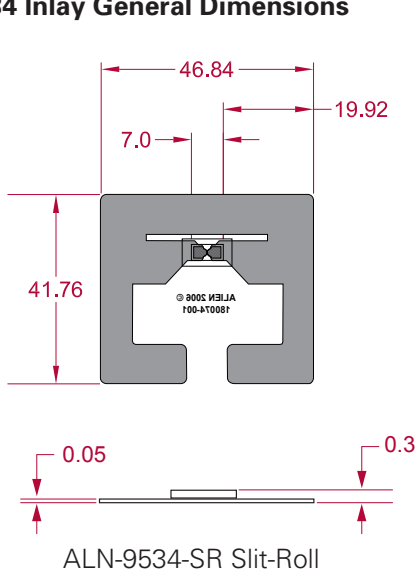


ALN-9534-SR Slit-Roll

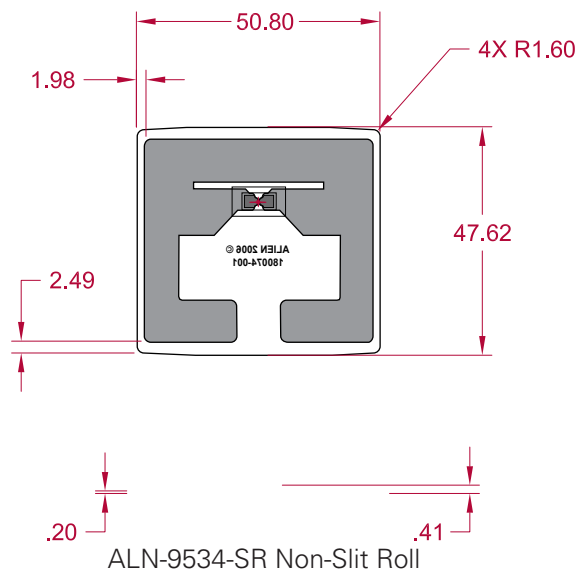


ALN-9534-SR Non-Slit Roll

ALN-9534 Inlay General Dimensions



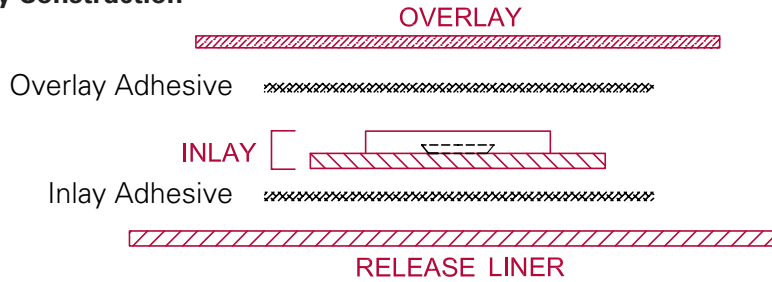
ALN-9534-SR Slit-Roll



ALN-9534-SR Non-Slit Roll

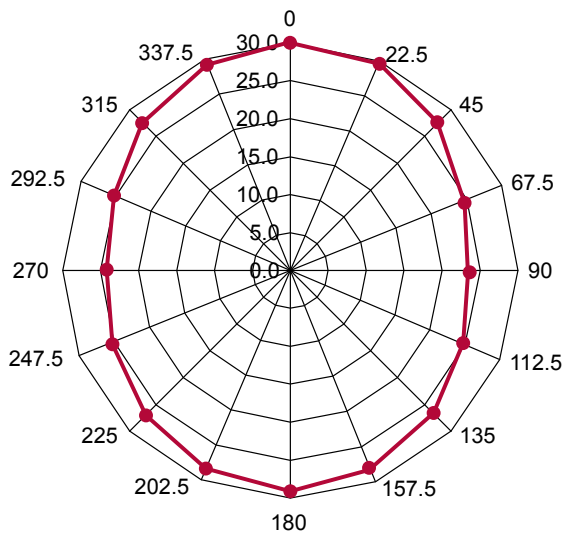


ALN-9534 Wet Inlay Construction

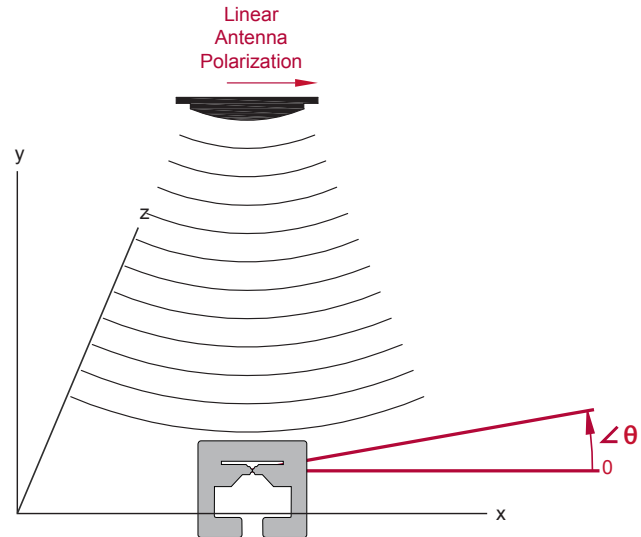


ALN-9534 Inlay Sensitivity & Orientation

World Tag Angular Sensitivity (dB vs. Angle Position)

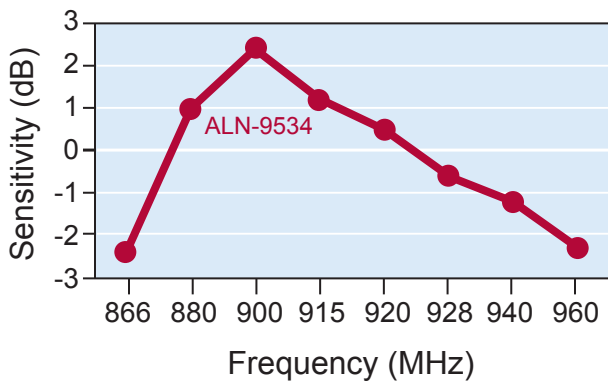


World Tag Relative Orientation Tag is rotated in the x, y, plane about the z axis

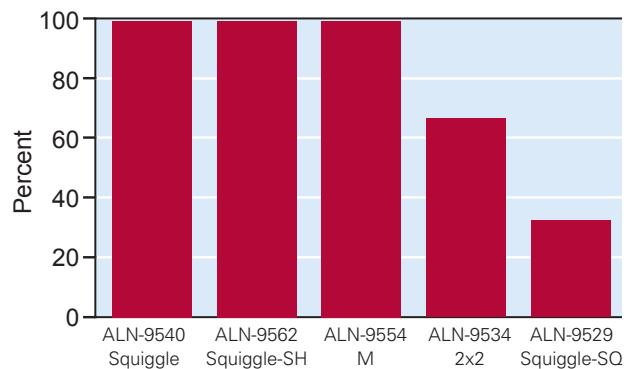


On-Product Performance Information

Frequency Response in Air Suitable for Global Use



Relative Range in Free Space





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ALN-9534 Specifications

Dry Inlay	
Antenna Width	46.8mm
Antenna Length	41.8mm
Web Width	50.5mm
Web Pitch	50.8mm
Core Width	57.1mm
Core ID	152.4mm
Core Material	Fiberboard
Interleaf Material	Paper
Interleaf Width	38.1mm
Inlays per Roll	7,500 Nominal
Roll OD	< 406.4mm Nominal
Roll Labeling Data	Roll #, Quantity

Wet Inlay	
Inlay Width	50.8mm
Inlay Length	47.6mm
Web Width	54.0mm
Web Pitch	50.8mm
Core Width	57.1mm
Core ID	152.4mm
Core Material	Fiberboard
Inlays per Roll	7,500 Nominal
Maximum Roll OD	< 406.4mm
Roll Labeling Data	Roll #, Quantity
Overlay	2.5 Mil White Polyolefin
Overlay Adhesive	Acrylic Emulsion
Inlay Adhesive	Rubber Based
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	10,000
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-2
EPCglobal Certificate	9501101260000001091
Operating Frequency	840–960 MHz
EPC Size	96 Bits
Access Password	32 Bits
Kill Password	32 Bits

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Alien Technology
18220 Butterfield Blvd.
Morgan Hill, CA 95037
866-RFID NOW
www.alientechnology.com