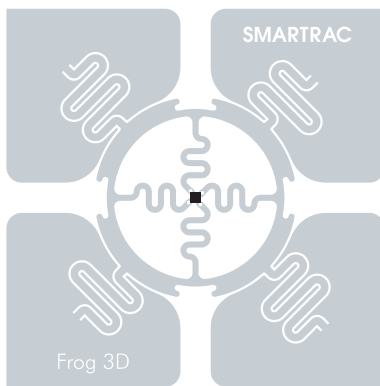


## FROG 3D

High performance product for supply chain applications.



Frog 3D tags and inlays are designed for pallet and case level applications offering high performance in supply chain management applications.

Frog 3D products have a small, cost-efficient True3D form factor with complete orientation insensitivity providing consistent performance even on challenging materials. High performance Frog 3D inlays deliver excellent read range and are compatible with the Impinj Monza 4 QT™ technology.

Frog 3D tags and inlays are produced using leading edge inlay assembly technologies. Monitoring every step in the production process, from the antenna to the final assembly of the inlay, guarantees optimal quality products.

### Benefits:

- ▶ True3D design with complete orientation insensitivity.
- ▶ Consistent and robust performance on various materials globally.
- ▶ Available in a small and cost-effective form factor.
- ▶ Monza 4 QT™ technology capability.
- ▶ Possibility for different memory options: EPC from 128 bit to 496 bit and user memory from 32 bit to 512 bit.
- ▶ ISO 9001:2008 Quality Management System and ISO 14001:2004 Environment Management System support.

### Overview

#### Operating Frequency

860 - 960 MHz

#### Integrated Circuit (IC)

Impinj Monza 4

#### Antenna Size

50 x 50 mm (1.97 x 1.97 in)

#### Die-cut Size

53 x 53 mm (2.09 x 2.09 in)

#### International Standards

EPC Class 1 Gen 2

ISO 18000-6C

#### Quality Assurance

100% performance tested

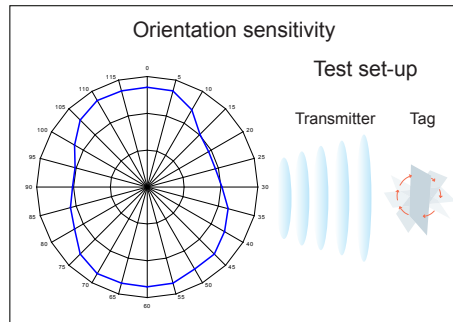
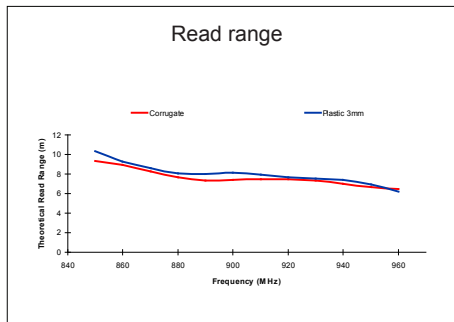
#### Application Areas

- ▶ Industrial Automation
- ▶ Supply Chain Management

## FROG 3D

| Technical Features   |   |
|--|---|
| IC   | Impinj Monza 4  |
| Memory   | EPC memory up to 496 bit / user memory up to 512 bit  |
| Frequency  | 860-960 MHz   |
| Antenna Size   | 50 x 50 mm / 1.97 x 1.97"                             |
| Die-cut Size   | 53 x 53 mm / 2.09 x 2.09"                             |
| Web Width  | 60 mm / 2.36"   |
| Operating Temperature  | -40°C to 85°C / -40°F to 185°F                        |
| Bending Diameter (D)   | > 50 mm, tension max. 10 N                            |
| Delivery Formats   | Dry inlay, wet inlay, tag                             |
| Adhesive   | Acrylic, water borne adhesive                         |
| Adhesive Usage Temperature                                     | min. -10°C to 120°C / min. 14°F to 248°F              |
| Qty/Reel   | 5,000 dry or wet inlays per reel, 2,500 tags per reel |
| Core Size  | 76 mm / 3"  |
| Shelf Life: minimum of 2 years from the date of manufacture in | 20°C / 68°F, 50% RH                                   |

SMARTRAC TECHNOLOGY GROUP uses three different qualification methods to evaluate the quality and reliability of RFID inlay and tag products. Products are tested according to IEC 60068-2-67 (temperature and humidity), JEESD22-A104-B (temperature cycling) and an in-house developed bending test.



All the graphs are indicative: performance in real life applications may vary. The data has been determined based on calculations for transmitters with a 2W ERP output power level.



RoHS CE

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