# Product Datasheet BEONTAG SILVERLINE BLADE II+



i) Description

On Metal RFID label with global reading and high memory IC for industrial applications



## Electrical specifications

**Device type** RAIN RFD / EPCglobal Gen2v2

Air interface protocol EPCGlobal Class1 Gen2 ISO 18000-6C

**Operational frequency** Global: 865 - 928 MHz

IC options and memory configurations Impinj M780<sup>™</sup> • EPC 496 bit; User 128 bit; TID 96 bit **EPC memory content** Unique random 96bit EPC in every label

**Read range (2W ERP)\*** On metal up to 7 m / 23 ft On plastic up to 3 m / 10 ft On liquid up to 5 m / 16 ft

**Applicable surface materials**\* Optimized for metal but works on any surface

**Attachment on curved surface** Label can be attached on a curved surface. Check installation instructions for more details.

\* Read ranges are theoretical values that are calculated for non-reflective environment. Different surface materials may have an effect on performance.



# **Mechanical specifications**

#### Label surface

Printable white PET, Zebra 5095 resin ribbon recommended.

#### **Background adhesiv**

High tack adhesive with excellent adhesion to all surfaces including low surface energy plastics.

Weight 0,9 g

#### **Delivery format**

400 pcs good labels on reel, bad ones marked with "XXX" printing. Typical yield >95%.

**Pitch on reel** 33,87 mm / 1.33"

Reel core inner diameter 76 mm / 3"

#### Tag dimensions

60 x 25 x 1.4 mm / 2.36 x 0.98 x 0.055"



# Radiation pattern

Below radiation pattern is measured on metal. Pattern may be affected by the shape of the tagged item.





**Operating temperature** -35°C to +85°C / -31°F to +185°F

**Peak temperature** +110°C / 230°F for 10min

Ambient temperature -35°C to +85°C /-31°F to +185°F

Water resistance IP68, tested for 5 hours in 1m deep water

#### Washing resistance

Tolerates industrial washing with standard solvents.

## **Printer Compatibility**

The **Beontag Silverline** family is designed and verified to work with the **Custom Zebra ZT410 RFID Silverline and ZT411 On Metal** printers. Other Zebra printers are not recommended or supported. Contact your Authorized Zebra Reseller for ordering information.

Set-up instructions and printer configurations specifically for Silverline tags and the compliant printers are available on Zebra.com or by contacting Zebra Technical Support.

Washing process should be tested in final application.

#### **Chemical resistance**

No physical or performance changes in:

- 168h Sulfuric acid (10%, pH 2) exposure
- 168h Motor oil exposure
- 168h Salt water (salinity 10%) exposure

• 2h NaOH (10%, pH 13) exposure Acetone should be avoided

#### **Storage condition**

1 year in +20°C / 50% RH

Environmental values are the best recommendations; resistance against different conditions depends on the combination of all influencing factors, exposure duration and chemical concentrations. Thus, product's final suitability for certain environmental conditions is recommended to be tested.





### Installation instructions



#### When attaching the label ensure the following

• Select a smooth surface without uneven areas below tag

• Avoid touching the background adhesive and IC location

When mounting the label with its adhesive, clean and dry the surface for obtaining the maximum bond strength. Typical cleaning solvents are heptane or acetone for oily surfaces or isopropyl alcohol for plastics. Do not use household cleaning solvents that contain oils. Carefully read and follow the manufacturer's precautions and directions for use when working with solvents.

Ideal application temperature is from +21°C to +38°C (+70°F to +100°F). Bond strength can be improved with firm application pressure and moderate heating up to +54°C (+130°F). Application at temperatures below 10°C (50°F) is not recommended.

Adhesive of **Beontag Silverline Blade II+** is having very high initial tack, meaning that it adheres in seconds and reaches close to final bonding strength in minutes. Adhesive is also suitable for other than metallic surfaces.

Optimal read range is achieved when is metal on the nonwrapped side of the label, like shown in the below picture.



Smallest recommended bending diameter of the **Beontag Silverline Blade II**+ is 100mm. For optimal performance please bend the label in the orientation shown below.





Zebra part number: **10039973** Product name: **Beontag Silverline Blade II+ M780 Global** 

For additional information and technical support, please contact your Authorized Zebra Reseller or Zebra Technical Support.

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## **About Beontag**

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From the science of graphic and label materials, RFID and wireless IoT enablers, we create solutions across the value chain to deliver digital transformation for businesses around the world.

Sustainability is at the core of what we do and we strongly believe that by substituting non-renewable materials and innovating through more sustainable and renewable products, we act as an ESG enabler for our customers' value chain.

Beontag is one of the world's leading providers of RFID and wireless IoT solutions, being present in more than 40 countries with 7 R&D centers and 2,000 employees, in constant development of technological and sustainable solutions designed to connect items, and gain efficiency and end-to-end traceability

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atlas**RFID**store (205) 383-2244 sales@atlasRFIDstore.com



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