Product Datasheet

BEONTAG CARRIER TOUGH SLIM

Description

Durable tag solution for reliable plastic container and returnable transit item tracking.

Electrical specifications

Device type
UHF RFID / EPCglobal Gen2v2

Operational frequency
Global 865-928 MHz

IC type
Impinj M780™

Memory configuration
EPC 496 bit; User 128 bit; TID 96 bit

EPC memory content
Unique random 96bit EPC in every label

Read range (2W ERP)*
On plastic up to 20 m / 65 ft

Applicable surface materials*
Non-metallic surfaces

* Read ranges are theoretical values that are calculated for non-reflective environment. Different surface materials may influence performance.

Mechanical specifications

Tag encapsulation
Scratch and bending-resistant engineering plastic

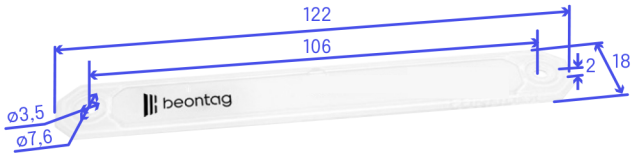
Background adhesive
High performance acrylic adhesive specifically for low surface energy plastics

Weight
1 g

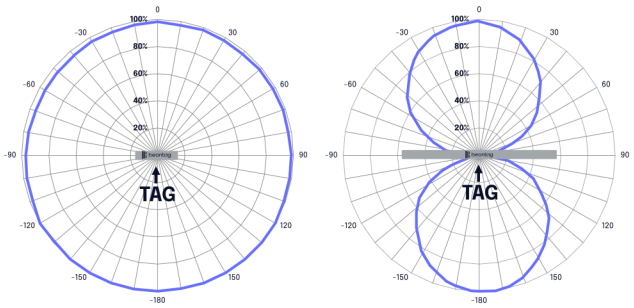
Delivery format
Single

Amount in box
Inner box: 100 pcs
Outer box: 1000 pcs

Tag dimensions
122 x 18 x 2 mm /
4.80 x 0.71 x 0.08 in



Radiation pattern



Personalization options

Pre-encoding
Customer-specific encoding of EPC or user memory. Locking permanently or with password.

Customized printin
Customer-specific layout including logo, text, numbers, barcodes etc.

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Environmental resistance

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

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

IP classification
IP68, tested 5 hours in 1m deep water

Washing resistance
Tolerates industrial washing processes

Chemical resistance
No physical or performance changes in:
- 168h Salt water (salinity 10%) exposure
- 168h NaOH (10%, pH 13) exposure
- 168h Motor oil exposure
- 168h Sulfuric acid (10%, pH 2) exposure

Storage condition
1 year in +20°C / 50% RH (shelf life for adhesive)

Expected lifetime
Years in normal operating conditions

Values in the table are the best recommendations; resistance against environmental 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. Contact Beontag for more specific information.

Installation instructions

Beontag Carrier Tough Slim polarization is along the longest dimension of the tag. This should be taken into account when linear reader antennas are used.

When selecting the location ensure the following
- Select a smooth surface without uneven areas below the tag
- Avoid touching the background adhesive

When mounting the label with its adhesive, clean and dry the surface for obtaining the maximum bond strength. Typical cleaning solvents are heptane for oily surfaces and isopropyl alcohol for plastics. Use reagent grade solvents since common household materials like rubbing alcohol frequently contain oils to minimize the drying effect on skin and can interfere with the performance of adhesive. Carefully read and follow the manufacturer's precautions and directions for use when working with solvents. Do not re-attach tags as adhesion will suffer.

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.

Beontag Carrier Tough Slim can also be attached mechanically with:
- M3 screws
- 3 mm pop rivets

In harsh conditions mechanical fixing is always recommended.

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Order information

Product number: **3004850**
Product Name: **Beontag Carrier Tough Slim M780**

For other versions, additional information and technical support please contact Beontag.

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About Beontag

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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