

# 1.6M RANGE UHF RFID FOR ON METAL

## ART915X100202TO-IC



10.0 x 2.5 x 2.5 mm

 RoHS/RoHS II Compliant

MSL = 2

### FEATURES

- Long 1.6m read range
- Compatible with any material, including metal
- Passive tag requires no battery or power supply
- Suitable for applications in harsh conditions
- Wide operating temperature -40~+85
- Compliant with ISO 18000-6C/EPC Class1 Gen2
- 902 ~ 928MHz operation
- Utilizing Alien H3 RFID chipset
- Compact 10.0 x 2.5 mm footprint
- 2.5 mm height ideal for low profile requirements

### APPLICATIONS

- Local asset tracking for industrial, heavy equipment, and data center applications
- Medical equipment
- Aviation equipment and tools
- Military devices and vehicles
- Oil and gas industry
- Trains and other transportation assets

### STANDARD SPECIFICATIONS

| Parameters                      | Min. | Typ.                         | Max. | Units | Note                              |
|---------------------------------|------|------------------------------|------|-------|-----------------------------------|
| Range of Receiving Frequency    |      | 866 - 868<br>902 - 928       |      | MHz   |                                   |
| Frequency of Lowest Return Loss |      | 915±5                        |      | MHz   | (Based on 150 x 150 mm GND Plane) |
| Polarization                    |      | Linear                       |      |       |                                   |
| IC Protocol                     |      | ISO 18000-6C/EPC Class1 Gen2 |      |       |                                   |
| Memory                          |      | 96 EPC                       |      | Bits  |                                   |
|                                 |      | 512 User                     |      | Bits  |                                   |
|                                 |      | 64 TID                       |      | Bits  |                                   |
| IC Type                         |      | Alien H3                     |      |       |                                   |
| Reading Range                   |      | 1.6                          |      | m     | On metal, 4W EIRP                 |
|                                 |      | 0.8                          |      | m     | In metal, 4W EIRP                 |
| Operating Temperature           | -40  |                              | +85  | °C    |                                   |
| Application Temperature         | -40  |                              | +150 | °C    |                                   |
| IP rate                         |      | IP68                         |      |       |                                   |



1501 Hidden Creek Lane Spicewood TX 78751  
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For terms and conditions of sales visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 02/26/2019

ABRACON IS  
ISO9001-2015  
CERTIFIED

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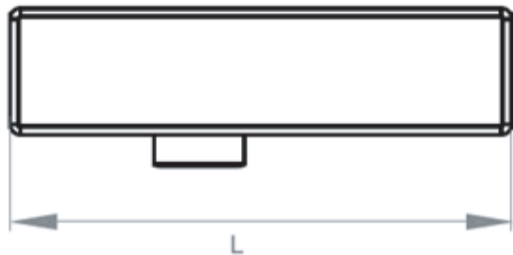
10.0 x 2.5 x 2.5 mm

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OUTLINE DRAWING | UNIT: mm

TOLERANCES ARE  $\pm 0.2$ mm, UNLESS OTHERWISE SPECIFIED

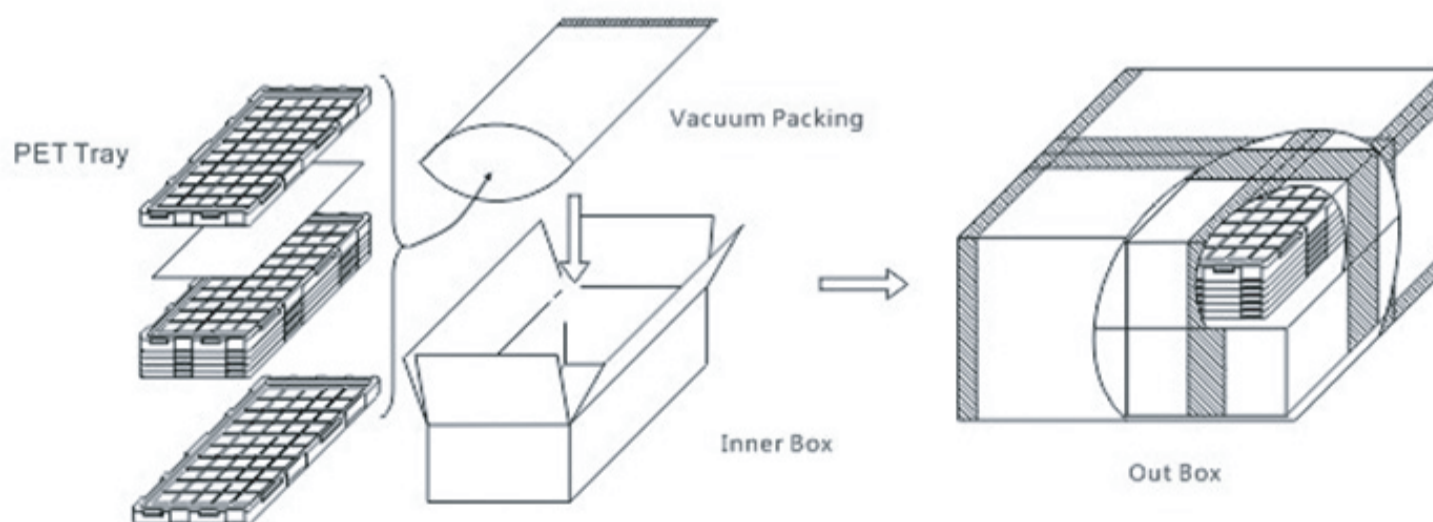
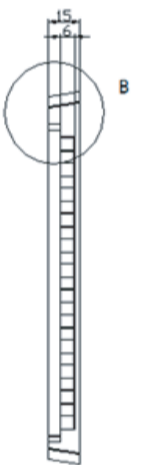
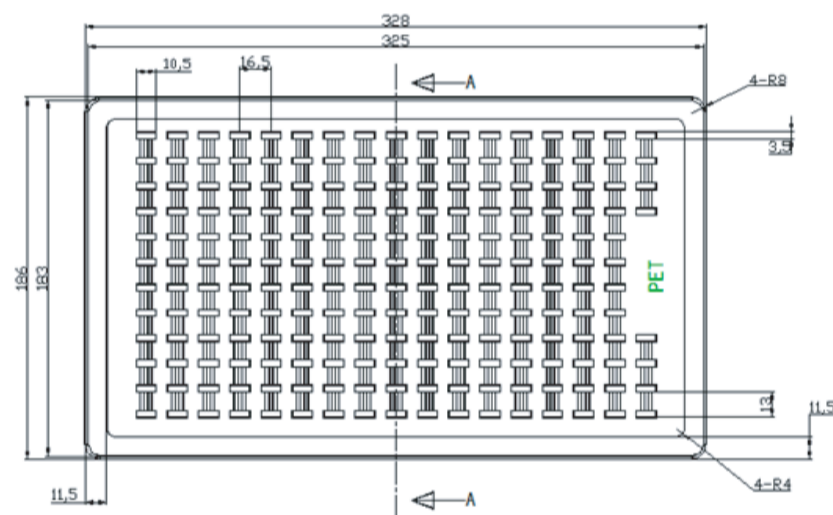


| L      | W       | H       |
|--------|---------|---------|
| 10 TYP | 2.5 TYP | 2.5 TYP |

## PACKAGING

200 PCS/TRAY, 4000 PCS/INNER BOX, 8000 PCS/CARTON

| Package Type | Quantity        |
|--------------|-----------------|
| Tray         | 200 pcs/tray    |
| Inner Box    | 4000 pcs/box    |
| Carton       | 8000 pcs/carton |



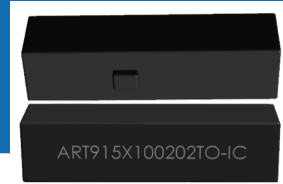
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## NOTE

1. The parts are manufactured in accordance with this specification. If other conditions and specifications which are required for this specification, please contact ABRACON for more information.
2. ABRACON will supply the parts in accordance with this specification unless we receive a written request to modify prior to an order placement.
3. In no case shall ABRACON be liable for any product failure from in appropriate handling or operation of the item beyond the scope of this specification.
4. When changing your production process, please notify ABRACON immediately.
5. ABRACON's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. ABRACON's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from ABRACON LLC is required. Please contact ABRACON LLC for more information.
6. All specifications and marking will be subject to change without notice.



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