# LONG RANGE RFID TAG IDEAL FOR METAL SURFACES

## ART923X1015YZ10-IC

**RoHS/RoHS II Compliant ESD Sensitive** MSL= 1

### **FEATURES**

- 0.45 meter read range on metal surfaces
- Wide -30°C to 85°C operating temperature range
- UHF band operation 902 to 928MHz
- Matched for lowest return loss at 915MHz
- Tag incorporates matched Alien H3 RFIC
- Ø10.0mm, 1.5mm height ceramic tag

**STANDARD SPECIFICATIONS** 

- IS0 18000-6C/EPC Class1 Gen2 compliant
- Peel & Stick easy installation
- Suitable for non-metal surfaces
- Robust, long life over wide temperature range

### APPLICATIONS

- Asset tracking: vehicles, machinery, tools, steel containers, servers, etc.
- Product inventory management: metallic assemblies, chassis, doors, equipment, etc.
- Industrial Internet of Things (IIoT)
- Automatic Vehicle Identification (AVI)
- Wildlife Identification and Waste Management
- Long distance RFID /Non-Stop Access Control

PARAMETERS	MINIMUM	TYPICAL	MAXIMUM	UNITS	NOTE
Range of Receiving Frequency	902-928			MHz	
Frequency of Lowest Return Loss	915±5			MHz	(Based On 200 x 200mm GND Plane)
IC Protocol	IS0 18000-6C/EPC Class1 Gen2				
Memory	96 EPC			Bits	
	512 User			Bits	
Reading Range		45		cm	
Working Temperature	-30		+85	°C	
Storage Temperature	-40		+110	$^{\circ}\mathrm{C}$	
Frequency Temperature Coefficient		0±10		ppm/°C	
ESD (HBM)			2	KV	2KV Class 2 HBM



5101 Hidden Creek Lane Spicewood TX 78669 Phone: 512-371-6159 | Fax: 512-351-8858 For terms and conditions of sale please visit: www.abracon.com **REVISED:** 07/19/2018

ABRACON IS ISO9001-2015 CERTIFIED

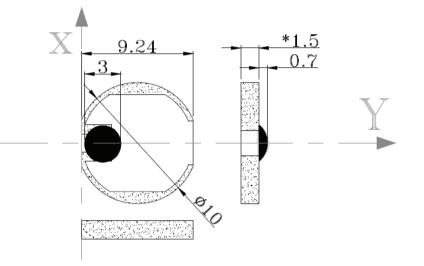
# LONG RANGE RFID TAG IDEAL FOR METAL SURFACES

# ART923X1015YZ10-IC

RoHS/RoHS II Compliant

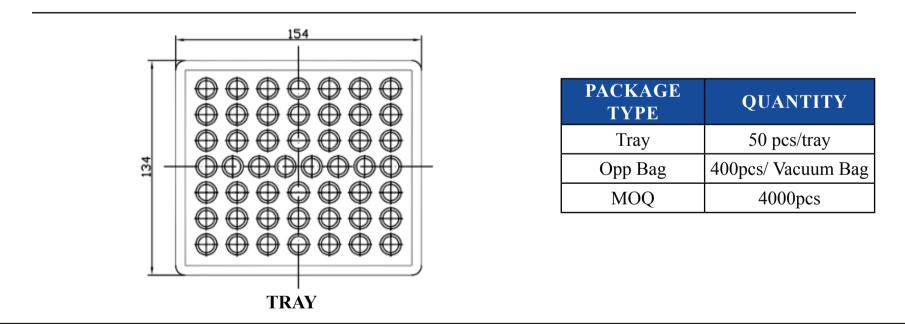
## MECHANICAL DIMENSIONS (ALL DIMENSIONS ARE IN mm)

## Tolerances are ±0.2mm, unless otherwise specified\*



Mounting: Mounted with adhesive/tape (not included).

## PACKAGING



### CAUTION

- 1. Do not apply excess mechanical stress to the component body or terminations. Do not attempt to re-form or bend the components as this will cause damage to the component.
- 2. Do not expose the component to open flame.
- 3. This specification applies to the functionality of the component as a single unit. For optimal performance, in-circuit validation is recommended.
- 4. Electrostatic sensitive device; observe standard precautions for handling.



5101 Hidden Creek Lane Spicewood TX 78669 Phone: 512-371-6159 | Fax: 512-351-8858 For terms and conditions of sale please visit: www.abracon.com

#### **REVISED:** 07/19/2018

ABRACON IS ISO9001-2015 CERTIFIED

# LONG RANGE RFID TAG IDEAL FOR METAL SURFACES

# ART923X1015YZ10-IC



## NOTES

- 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 post-validation, 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 damage.
- 6. All specifications and Marking will be subject to change without notice.



5101 Hidden Creek Lane Spicewood TX 78669 Phone: 512-371-6159 | Fax: 512-351-8858 For terms and conditions of sale please visit: www.abracon.com **REVISED: 07/19/2018** 

ABRACON IS ISO9001-2015 CERTIFIED

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ABRACON: ART923X1015YZ10-IC