







# **RF MS AC01 Tag**

(Healthcare Version)

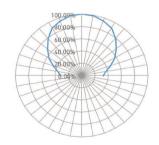
+135°C **Autoclave** 

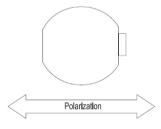
# DATA SHEET

Product Description	RF MS AC01 Tag
Electrical Characteristics	
Operating Frequency	UHF 902-928 MHz (US); 866-868 MHz (EU)
Chip type	Alien Higgs-3
RFID Standards	EPCGlobal Class1Gen 2; ISO18000-6C
Read range	Depending on read/write performance of the RFID Reader up to 5 ft (1.5 m)
Memory configuration	96-EPC bits; 512-bit user memory
Memory – expected read / write cycles	100,000 cycles at 77°F (25°C)
Polarization	Linear
Application temperature (MIL STD 810-F)	from -67°F to +302°F (-55°C to +150°C)
Operational temperature (MIL STD 810-F)	from -40°F to +185°F (-40°C to +85°C)
Data preservation	Up to 50 years *
Packaging Protection Class	IP69K
Compression strength	181 psi (1250 kPa)
FDA class	Class I
Read rate	400 tags per second for 96-EPC bit number
RoHs Compliance	YES
Material specifications	Ceramic
Applicable surface	Metal surfaces

# Physical Characteristics

Dimensions: Ø 6 x 2.5 (+/- 0.2) mm / Ø 0.24 x 0.1 +/- 0.008)in





Radiation pattern

Article no:	RF MS AC01 Tag	
Typical Applications		
Healthcare & hospital	sample identification	
Autoclave cleaning	identification and back tracing	
bio/chemistry/forensic/pharmacy/environment	process control. QS & monitoring	







+150°C Autoclave



# **RF MS AC01 Tag**

(Healthcare Version)

RF MS AC01 Tag

### Cleaning and Disinfection Process (ANSI/AAMI ST79)

### Chemical sterilization for decontamination

Liquid chemical sterilants include glutaraldehyde, hydrogen peroxide, hydrogen peroxide-peracetic acid combinations, sodium hypochlorite, and peracetic acid. Pass

### Thermal (hot water) disinfection

- Washer-sanitizers, washer-decontaminators, utensil washers, and cart washers reduce microbial contamination by means of cleaning agents, hot water, rinsing, and drying. Pass
- Pasteurization equipment provides cleaning and high-level disinfection at water temperatures of 65°C to 77°C (150°F to 170°F) for a contact time of at least 30 minutes. Pass
- Washer-disinfectors provide a cycle of cleaning, rinsing, disinfection, and drying at temperatures that are usually higher than those of washer-sanitizers. Pass

### Thermal sterilization for decontamination

Saturated steam can be used to decontaminate devices capable of withstanding high temperatures (121°C to 135°C [250°F to 275°F]) and pressures (16 to 35 psig). Washer-sterilizers provide cleaning and rinsing followed by exposure to saturated steam at temperatures of 121°C to 135°C (250°F to 275°F). Pass

### Ultrasonic cleaner

3 KHz for 30 min Pass

### Dry heat sterilization

160°C for 2h, or 170°C for 1h, or 180°C for 30min Pass

### Disinfection by light

C wave ultraviolet and wavelength range is from 200nrn to 275nrn Pass

### Detergent enzyme cleaner Pass

### Autoclave sterilization

121°C and 115Kpa for 1000 cycles Pass



## Typical applications (Tag inserted into steel carrier):



