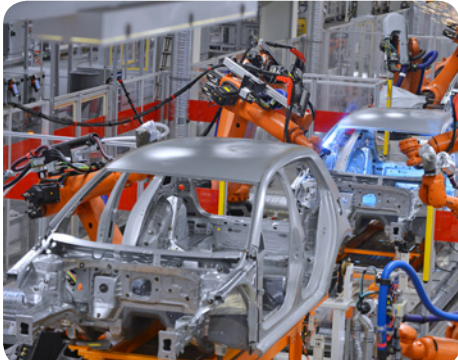


# High Temperature Label



## WAFER-THIN UHF RFID TAGS THAT WEATHER HARSH TREATMENT

- **High heat** - endures up to 446° F (230° C)
- **Impermeable** - repels moisture, oils, petroleum and salt mist
- **Flexible** - tolerates bending and torsion with uncompromised performance

The rugged High Temperature Label portfolio of UHF RFID tags can withstand exposure to high temperatures, flames, chemicals, pressure and torsion, with uncompromised performance.

Originally designed for the automotive industry, High Temperature Labels help identify and track each vehicle both during assembly and throughout its life on the road. Lifetime traceability of auto parts and components enables more accurate and efficient records which can help automakers expedite service in the event of a recall.

High Temperature Labels deliver consistent and reliable readability during the rigors of auto manufacturing, including welding operations, autoclaves, anti-corrosive electrolyte baths, cycles of paint layer application, and drying ovens that exceed 400° F (200° C).

Resistance to severe physical, mechanical and thermal environments makes this portfolio of tags ideal for all types of manufacturing, logistics and inventory control operations, especially tracking both work-in-progress and finished goods for various products such as industrial tools, medical trays, heavy equipment, car and aerospace components, cargo containers, and even blade and rack servers.

Standard High Temperature Labels are compliant with EPC Global Class 1 Gen 2, ISO 18000-6C readers. Custom form factors are available to meet specific needs; for example, they may be laser-imprinted with barcodes, QR codes or text, enabling visual systems to work in combination with advanced RFID capabilities.

### TECHNOLOGY HIGHLIGHTS

- Broadband worldwide operating frequency, 865 to 956 MHz
- 512 bit EEPROM user memory
- Performs from -40° to +446° F (-40° to +230° C)
- Highly resistant to water, oils, petroleum, salt mist and flames
- Thickness less than 0.02 in (0.5 mm)
- EPC Global Class 1 Gen 2, ISO 18000-6C

**APPLICATION AREAS:**

- Asset tracking and logistics
  - Equipment
  - Fleet management
  - Tools
- Automation and manufacturing
  - Aerospace
  - Automotive
  - Machinery



**SPECIFICATIONS**

	<b>High Temperature Label</b>
<b>Base Model Number</b>	6A7902
	<b>ELECTRONIC</b>
<b>Operating Frequency</b>	865-956 MHz (Worldwide)
<b>Chip Type</b>	Monza 4QT
<b>Memory</b>	128 bit EPC + 96 bit TID + 512 bit EEPROM
<b>Anti-Collision</b>	Yes
<b>Reading Distance</b> 2 W reader ERP, free space	Up to 26.2 ft (8 m)
	<b>PHYSICAL</b>
<b>Dimensions</b>	3.1 x 2.0 x 0.02 in (80 x 50 x 0.5 mm)
<b>Mounting Method</b>	Screw or rivet
<b>Fixation Hole Size</b>	Ø 0.2 in (5 mm) x 2
<b>Affixes To</b>	Glass, plastic, wood, metal (if tag in free air)
<b>Housing Material</b>	Aramid polymer
<b>Color</b>	Beige
<b>Weight</b>	0.1 oz (2.5 g)
	<b>CHEMICAL AND MECHANICAL RESISTANCE</b>
<b>Water</b>	IP68, 68° F (20° C), 3.3 ft (1 m) x 24 h
<b>Withstands Exposure To</b>	Mineral oil, petroleum, salt mist, vegetable oil
<b>Environmental Test Conditions</b>	68° F (20° C), 100 h
<b>Flame Resistance</b>	UL 94V-0
<b>Vibration</b>	IEC 68.2.6 [10 g, 10 to 2000 Hz, 3 axis, 2.5 h]
<b>Shock</b>	IEC 68.2.29 [40 g, 18 ms, 6 axis, 2000 times]
<b>Axial / Radial Force</b>	50 N, 1 x 10 sec
<b>Bending</b>	Soft: 11.8 in (300 mm) curve radius x 100 Hard: 3.9 in (100 mm) curve radius x 10
	<b>THERMAL</b>
<b>Storage</b>	-40° to +185° F (-40° to +85° C)
<b>Operating</b>	-40° to +185° F (-40° to +85° C)
<b>Shock/Fatigue</b>	+68° to +446° F (+20° to +230° C), 20 min with 30 sec transition x 3
<b>Peak</b>	284° F (140° C), 400 h 356° F (180° C), 100 h 446° F (230° C), 20 h
	<b>OTHER</b>
<b>Standards</b>	UHF EPC Class 1 Gen 2, ISO 18000-6C
<b>Options</b>	Laser imprinting; encoding; alternate form factors
<b>Box Size</b>	800 pcs.
<b>Warranty</b>	2 Year



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