

Model C1909-H3 Ceramic RFID Tag

Specifications & Data Sheet

The Model C1909-H3 Ceramic RFID Tag is capable of surviving 230°C (442°F) and is specifically designed for on metal mounting or subsurface metal mounting. It's small size and low profile are particularly useful in tool identification projects. For subsurface mounting into metal, the backside of the Tag must be mounted directly to metal with 4mm of free air spacing around the circumference, normally filled in with an epoxy.

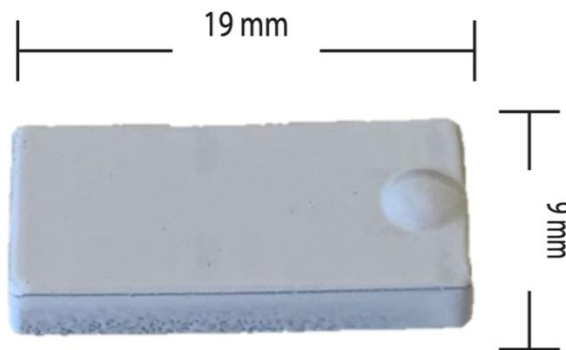


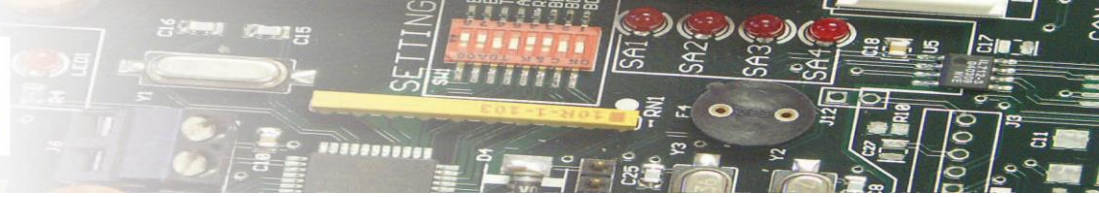
| Model Number | Part Number | Description | Read Range (on metal) |
|--------------|-------------------|--|---|
| C1909-H3 | 807-0004-C1909-H3 | Model C1909-H3 Ceramic High Temperature Tag 230°C (442°F) | A99H Antenna – 10' A55C Antenna – 20" A64C Antenna – 3' |

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|------------------------|--------------------|----------------------|------------------------------|
| Mechanical: | Measurements: | 19x9x3mm | .75" x .35" x .12" |
| | Material: | Ceramic | |
| Certifications: | Weight: | 0.112 ounces | 3.2 grams |
| | RoHS III | REACH | CE |
| | FCC Part 15 & ETSI | ATEX compliant, SIL2 | Free of BBP, DEHP, DBP, DIBP |

| | | | |
|-------------------------------|----------------------|-------------------------------|-----------------------------|
| Alien Higgs 3: RF: | TID – 64 bits | UID/EPC – 96 to 480 bits | User Memory – 512 bits |
| | Standard: | EPC Class1 Gen2 | ISO 18000-6C |
| | Frequency: | 902 – 928 MHz (North America) | 860 – 870 MHz (EU, Japan) |
| | Power: | Passive, no Battery | Powered by Reader RF Signal |
| Chip Options (page 2): | TID – 32 to 208 bits | EPC – 0 to 496 bits | User – 0 to 61,400 bits |

| | | | |
|-----------------------|---------------------|--------------------|-----------------|
| Environmental: | Storage Temp: | -40°F to +442°F | -40°C to +230°C |
| | Temp, Operating: | -40°F to +185°F | -40°C to +85°C |
| | Life: | 40 Year Shelf Life | 100k Writes |
| | Ingress Protection: | IP68 | |





Available UHF Memory Chips:

| | | | |
|------------------------|------------------|------------------|--------------------------|
| Alien | TID (ROM) | UID (EPC) | User Memory |
| Higgs3 | 64 bits | 96 to 480 bits | 512 bits |
| Higgs4 | 64 bits | 128 bits | 128 bits |
| HiggsEC | 48 bits | 96-128 bits | 128 bits |
| Higgs9 | 48 bits | 496 bits | 688 bits |
| EM | TID (ROM) | UID (EPC) | User Memory |
| EM4123 | 64 bits | 0 bits | 0 bits |
| EM4124 | 64 bits | 96 bits | 0 bits |
| EM4126 | 32 bits | 208 bits | 0 bits |
| EM4324 | 64 bits | 96 bits | 720 bits |
| EM4325 | 48 bits | 352 bits | 3072 bits |
| EM4423 dual HF NFC/UHF | 96 bits | 64-160 bits | 0 bits |
| EM4425 dual HF NFC/UHF | 96 bits | Up to 480 bits | Up to 2048 bits less EPC |
| Fujitsu (FRAM) | TID (ROM) | UID (EPC) | User Memory |
| MB97R88110 | 208 bits | 480 bits | 61,400 bits |
| MB97R88120/8130 | 208 bits | 480 bits | 61,400 bits |
| MB97R8050 | 176 bits | 160 bits | 0 bits |
| Impinj | TID (ROM) | UID (EPC) | User Memory |
| M4D | 96 bits | Up to 128 bits | 32 bits |
| M4E | 96 bits | Up to 496 bits | 128 bits |
| M4QT | 96 bits | Up to 128 bits | 512 bits |
| M4i | 96 bits | Up to 256 bits | 480 bits |
| MX-8k | 96 bits | Up to 128 bits | 8,192 bits |
| Monza R6P | 96 bits | Up to 128 bits | Up to 64 bits |
| Monza R6 | 96 bits | 96 bits | 0 bits |
| Monza R6A | 96 bits | 96 bits | 0 bits |
| Monza R6B | 96 bits | Up to 128 bits | 32 bits |
| Monza 5 | 96 bits | 128 bits | 32 bits |
| M730 | 96 bits | 128 bits | 0 bits |
| M750 | 96 bits | 96 bits | 32 bits |
| NXP | TID (ROM) | UID (EPC) | User Memory |
| UCODE 7 | 48 bits | 128 bits | 0 bits |
| UCODE 7m | 48 bits | 128 bits | 32 bits |
| UCODE 7xm | 48 bits | 448 bits | 1024 bits |
| UCODE 7xm+ | 48 bits | 448 bits | 2048 bits |
| UCODE 8 | 96 bits | 128 bits | 0 bits |
| UCODE 8m | 96 bits | 96 bits | 32 bits |
| UCODE 9 | 96 bits | 96 bits | 0 bits |
| UCODE G2iL & G2iL+ | 64 bits | 128 bits | 0 bits |
| UCODE G2iM | 96 bits | 256 bits | 512 bits |
| UCODE G2iM+ | 96 bits | Up to 448 bits | Up to 640 bits |
| UCODE G2XM | 64 bits | 240 bits | 512 bits |
| UCODE G2XL | 64 bits | 240 bits | 0 bits |
| UCODE HSL | 64 bits | 0 bits | 1680 bits |

