

## Model F9525-U8 FR4 RFID Tag

## Specifications & Data Sheet

FR4 Tags are specifically designed to perform better when mounted on metal and can be subsurface metal mounted as well with some minimal free air (normally filled with epoxy) around its perimeter. Encapsulated in a hard thermoplastic shell is a high-performance NXP UCODE 8 memory chip. FR4 Tags are also capable of surviving high temperature processes of up to 200°C (392°F) indefinitely and beyond dependent upon their time of exposure.

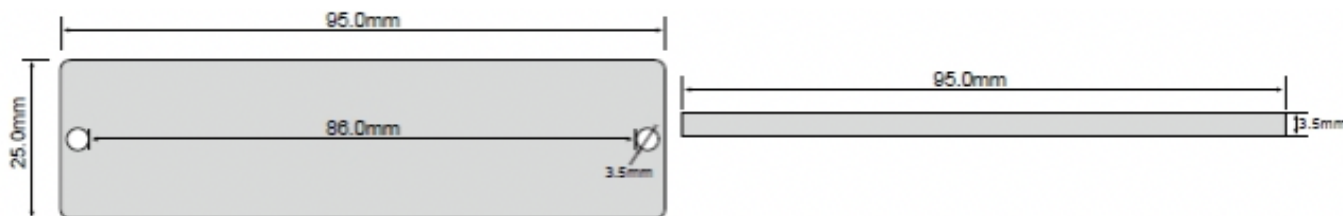


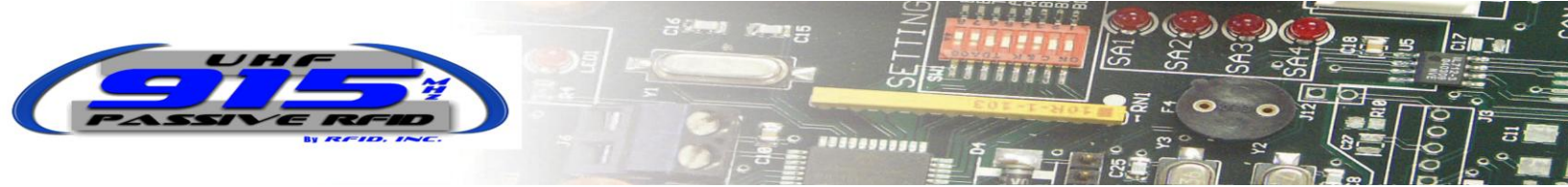
| Model Number | Part Number       | Description                                  | Read Range (on metal)                                         |
|--------------|-------------------|----------------------------------------------|---------------------------------------------------------------|
| F9525-U8     | 807-0001-F9525-U8 | Model F9525-U8 FR4 UHF RFID Tag, Metal Mount | A99H Antenna – 25'<br>A55C Antenna – 13'<br>A64C Antenna – 8' |

|                        |                    |                      |                              |
|------------------------|--------------------|----------------------|------------------------------|
| <b>Mechanical:</b>     | Measurements:      | 95x25x3.5mm          | 3.7"x.98"x.14"               |
|                        | Material:          | FR4                  | Epoxy Top                    |
|                        | Weight:            | 0.6 ounces           | 18 grams                     |
| <b>Certifications:</b> | RoHS III           | REACH                | CE                           |
|                        | FCC Part 15 & ETSI | ATEX compliant, SIL2 | Free of BBP, DEHP, DBP, DIBP |

|                                   |               |                               |                             |
|-----------------------------------|---------------|-------------------------------|-----------------------------|
| <b>NXP UCODE 8:</b><br><b>RF:</b> | TID – 96 bits | EPC – 128 bits                | User Memory - 0 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 |
| <b>Chip Options (page 2):</b>     |               | TID – 32 to 208 bits          | EPC – 0 to 496 bits         |
|                                   |               |                               | User – 0 to 61,400 bits     |

|                       |                     |                    |                |
|-----------------------|---------------------|--------------------|----------------|
| <b>Environmental:</b> | Storage Temp:       | -40°F to +392°F    | -40°C to 200°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                |

