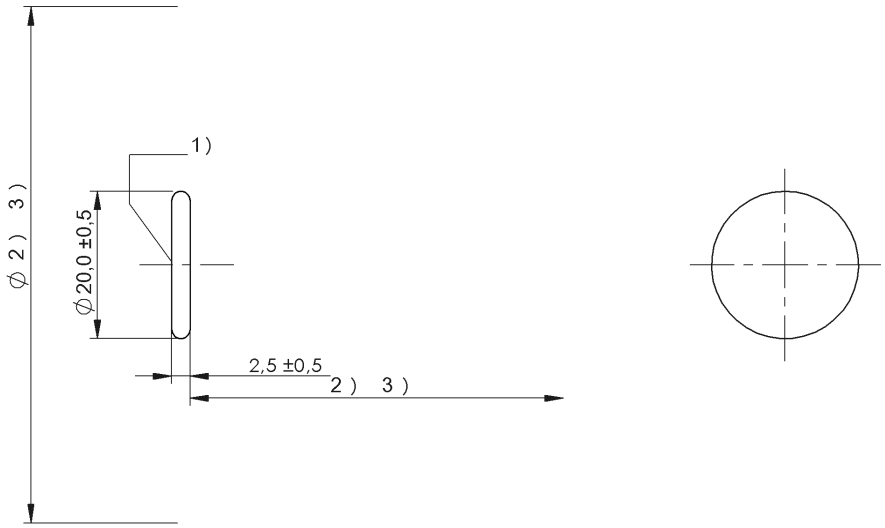
HF (13.56 MHz)

# BIS M-110-02/L
# Order Code: BIS0044




1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head

## Basic features

| | |
|---|---|
| **Antenna type** | round |
| **Approval/Conformity** | CE<br>WEEE<br>EAC |
| **EN 55011** | Size 1, Cl. A |
| **EN 55022** | Size 1, Cl. B |
| **Food compatibility** | Directive 02/72/EC |
| **Food compatibility** | Directive 02/72/EC |
| **Principle of operation** | Data carrier |

## Electrical data

| | |
|---|---|
| **Data retention time/years** | ≥ 10 at 55 °C |
| **Memory organization** | 250 × 8 bits |
| **Programming cycles** | ≥ 10.000.000.000 |
| **Programming time** | for 16 bytes: 0.060s |
| **Read cycles** | Unlimited |
| **Read time** | User ID for 8 bytes: 0.02 s<br>for 16 bytes: 0.03 s |

## Environmental conditions

| | |
|---|---|
| **Ambient temperature** | -25...85 °C |
| **Continuous shock load** | yes |
| **EN 60068-2-27, Shock** | yes |
| **EN 60068-2-32 Free fall** | yes |
| **EN 60068-2-6, Vibration** | yes |
| **IP rating** | IP68 |
| **Storage temperature** | -25...85 °C |
| **Storage temperature temporary** | 140 °C 1x100 h<br>-40 °C…90 °C 1x1000 h |
| **Temperature shock** | -20 °C…+85 °C 50x10 min. with transposition in 30 s |

## Functional Characteristics

| | |
|---|---|
| **Memory type** | FRAM |
| **Supported data carrier types** | DIN ISO 15693 |
| **UID serial number, read-only** | 8 Byte |
| **User data, read/write** | 2000 Byte |

## Material

| | |
|---|---|
| **Housing material** | PA 6 |

## Mechanical data

| | |
|---|---|
| **Application weight** | 1.30 g |
| **Dimension** | Ø 20 x 2.8 mm |
| **Installation** | metal-free (clear zone)<br>on metal |

## Remarks

Values are under rated conditions unless otherwise specified.
Only when used together with the appropriate read/write head.
For installation requirements see corresponding read/write head.
Time specification includes data check.
Torsional, bending and impact loading is not permitted.
For installation in metal: Observe clear zone.
IP68 tested according to BWN Pr 36