

PRODUCT DATASHEET

HF NFC SMART CARD

ISO/IEC 14443 Type A | 13.56 MHz

Brand / OEM:

Soochak Bharat Technologies Private Limited

1. Product Overview

Soochak Bharat HF NFC Smart Cards are contactless cards operating at **13.56 MHz**, compliant with **ISO/IEC 14443 Type A** and **NFC Forum standards**. These cards are designed for secure identification, access control, attendance systems, cashless payments, and smart authentication applications. They offer excellent durability, fast read/write performance, and wide compatibility with NFC-enabled smartphones and readers.

2. Physical Specifications

| Parameter | Specification |
|-----------|---------------|
|-----------|---------------|

| | |
|-----------|------------------------|
| Card Type | Contactless Smart Card |
|-----------|------------------------|

| | |
|---------------|-------------------------|
| Standard Size | CR80 (85.60 × 53.98 mm) |
|---------------|-------------------------|

| | |
|-----------|----------------|
| Thickness | 0.76 ± 0.08 mm |
|-----------|----------------|

| | |
|----------|----------------------------|
| Material | PVC / PET / ABS (Optional) |
|----------|----------------------------|

SOOCHAK BHARAT TECHNOLOGIES PRIVATE LIMITED

Color White (Custom colors available)

Weight Approx. 6 g

Surface Finish Glossy / Matte (Optional)

3. Electrical & IC Specifications

| Item | Details |
|----------------|--------------------------|
| NFC IC | Feiju F8213 / Equivalent |
| Frequency | 13.56 MHz |
| Protocol | ISO/IEC 14443 Type A |
| NFC Type | NFC Forum Type 2 |
| Operating Mode | Passive (Battery-free) |
| UID | 7 Bytes (Read-Only) |
| Total Memory | 180 Bytes |

User Memory 144 Bytes (Read/Write)

Password Protection 4 Bytes (Write-Only)

Data Retention 10 Years

Write Endurance ≥100,000 Cycles

Read Range Up to 5–10 cm (Reader dependent)

4. Card Construction

- **Antenna:** Embedded Copper / Aluminum Coil
 - **Chip Mounting:** Ultrasonic / Flip-chip bonding
 - **Lamination:** Multi-layer heat-laminated structure
 - **Printing Compatibility:** Offset, Digital, Thermal, UV
-

5. Environmental Specifications

| Condition | Range |
|-----------------------|----------------|
| Operating Temperature | -20°C to +50°C |

Storage Temperature -25°C to +60°C

Humidity 20% to 80% RH

Durability Resistant to bending, wear & tear

6. Personalization & Customization (Optional)

- Logo & Graphic Printing
 - UID / Data Encoding
 - QR Code / Barcode Printing
 - Serial Numbering
 - Signature Panel
 - Magnetic Stripe (Optional)
 - Punch Hole / Slot (Optional)
-

7. Applications

- Access Control Systems
 - Employee / Student ID Cards
 - Attendance & Time Tracking
 - Visitor Management
 - Loyalty & Membership Cards
 - Cashless Payments (Closed Loop)
 - Public Transport & Ticketing
-

8. Compliance & Standards

- ISO/IEC 14443 Type A
- NFC Forum Compliant

- RoHS Compliant
 - REACH Compliant
-

9. Packaging Details

| Item | Specification |
|--------------|------------------------------|
| Packing | Shrink-wrapped / Box Packing |
| Quantity | 100 / 200 / 500 pcs per box |
| Bulk Packing | As per customer requirement |
| Shelf Life | 2 Years (Proper storage) |

10. Handling Instructions

- Do not punch or drill card without antenna-safe layout
 - Avoid exposure to strong magnetic fields
 - Do not bend or heat above operating limits
-

Manufacturer / OEM

Soochak Bharat Technologies Private Limited
Smart Cards • NFC • RFID • Identification Solutions