



SIC279

134.2 kHz, Multi-Purpose R/W HDX RFID Transponder 12 mm
REV 1.2

Features Summary

Highlight Features

- New improvement from its predecessor to fully support
- Industrial application (BDE format)
- Customizable, long read range R/W RFID transponder
- Half duplex FM telegram 124/134 kHz contactless read/write data

Supported Protocols

- Compliant with BDE format (for waste management application)
- Fully compliant with ISO 11784/11785 HDX R/O Animal tag
- ID data protocol/structure
- Fully compliant with mainstream HDX R/W ID format

Application

- HDX industrial application
- Waste bin tag (BDE)
- HDX ISO 11784/85 Animal Tag, ICAR-compliant RFID tags
- Long Read-Range EAS Transponders

Memory

- R/W user memory of 6X32 (192 bits)
- Supporting user access to factory unique ROM ID (UID), preventing chips from cloning
- Direct Access/Write Mode
- Protected Direct Access/Write Mode
- One-time programming (OTP) configuration
- Write endurance > 100,000 R/W cycles
- Memory retention > 20 years

Commands

- Proprietary command protocol
- Comprehensive error logging reports
- Support cascade commands

Operating Conditions

- Carrier frequency f_c is 134.2 kHz
- Operating temperature: -25°C to 85°C

Revision History

Revision	Date	Description	Change/Update Comment
1.0	10 Jan 2025	1 st Release	Official release
1.1	6 May 2025	Updated	Update Ordering Information
1.2	11 Jun 2025	Updated	Document template

Ordering Information

Part No.	Description	Package	Standard Packing
P29AGU59GA0AE2910G2	SIC279-10, LF HDX IC with Animal ID R/W Glass tag 134.2kHz 12mm Bio glass, Bag, RFID TAG	Glass Transponder 2.12x12 mm	1,000 pcs/Canister

Packaging and Dimension

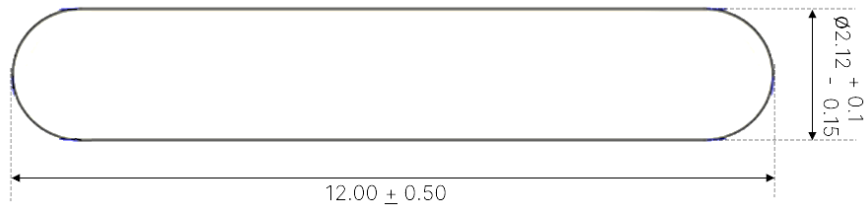


Figure 0-1: Drawing and Dimension

Parameter	Description	Min	Typ	Max	Unit
L	Package length	11.50	12.00	12.50	mm
D	Package diameter	1.97	2.12	2.22	mm

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