



SIC279

134.2 kHz, Multi-Purpose R/W HDX RFID IC with 192 bits of User Memory
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

Interface and Peripheral

- 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

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

Package

- Glass Transponder 23 mm

Applications

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



Revision History

Revision	Date	Change/Update Comment
1.0	18 Jan 2022	Official Release
1.1	12 Dec 2022	Update document template
1.2	5 Jun 2025	<ul style="list-style-type: none">• Update document template• Update ordering information

Ordering information

Part No.	Description	Configuration	Standard Packing
P29AGU53GL0SU2910C3	SIC279-10, LF HDX IC with RW memory 512 bits and Animal ID Glass tag 134.2kHz, Canister, RFID TAG	Standard	2,000 pcs/Canister
P29AGU53GL0SU2915C3	SIC279-15, LF HDX IC with Animal ID - Read only Glass tag 134.2kHz, Canister, RFID TAG	Custom #15	2,000 pcs/Canister
P29AGU53GL0SU2922C3	SIC279-22, LF HDX IC with RW memory 512 bits and Industrial ID Glass tag 134.2kHz, Canister, RFID TAG	Custom #22	2,000 pcs/Canister
P29AGU53GL0SU2923C2	SIC279-23, LF HDX IC with Industrial ID - Read only Glass tag 134.2kHz, Canister, RFID TAG	Custom #23	1,000 pcs/Canister
P29AGU53GL0SU2926C3	SIC279-26, LF HDX IC with RW memory 512 bits and Industrial ID Glass tag 134.2kHz, Canister, RFID TAG	Custom #26	2,000 pcs/Canister
P29AGU53GL0SU2927C3	SIC279-27, LF HDX IC with Industrial ID - Read only Glass tag 134.2kHz, Canister, RFID TAG	Custom #27	2,000 pcs/Canister

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Package information

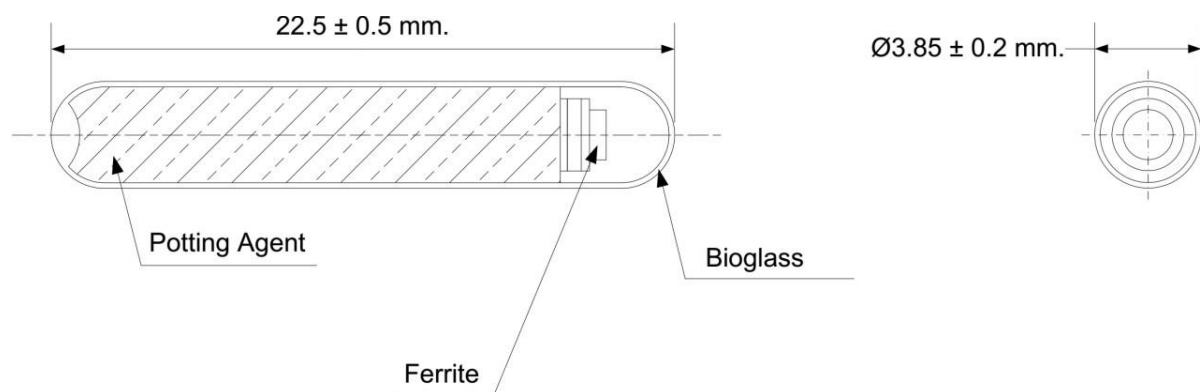


Figure 1: Drawing and dimension

Table 1: Package specifications

Item	Parameter	Value	Tolerance	Unit
Glass Transponder	Length	22.50	± 0.50	mm
	Width	3.85	± 0.20	mm

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