Tagreader IC

Overview

Frequency Band LF 100 - 150 kHz

Chip ASIC

Hard Tag Dimensions 9.93 x 5.99 mm / 0.39 x 0.23 in

Industry Segments Automotive

ApplicationsImmobilizer Systems



Fully integrated CMOS transceiver IC

Our Tagreader IC base station IC is a fully integrated CMOS transceiver IC minimising the influence on reading / writing distances caused by the given tolerances of the primary resonance circuit.

It is intended for use in an automotive immobilizer RFID base station with the following functions:

- Antenna driving with carrier frequency by internal PLL, or external clock.
- Integrated PLL system to achieve self adaptive carrier frequency matched to the antenna resonant frequency.
- 100% AM modulation (OOK) of the field for writable transponders.
- AM demodulation of the antenna signal modulation induced by the transponder modulation.
- Two sampling points for demodulation to avoid the "Zero crossing" effect.
- Communication with the microcontroller via a 3 wire interface.
- Only a few external components are needed to ensure a very cost efficient and reliable solution for the ever increasing demands of the automotive industry.
- Frequency range of 100 150 KHz perfectly matches our Automotive transponder portfolio.
- Self diagnostic features are implemented including optional reading of PLL lock frequency to assist in more reliable transponder communication.



Technical features

TID Memory Available Sleep Mode Current 1 μA typ. Driver Antenna Bridge 250 mA continuous Product Code 801101 Hard Tag Dimension 9.93 x 5.99 mm / 0.39 x 0.23 in Thickness 1.63 mm / 0.06 in Housing Material G 600 Color Black Operating -40 °C to 85 °C Temperature -40 °F to 185 °F Storage -40 °C to 90 °C Temperature -40 °F to 194 °F (max. 1000h)		
Sleep Mode Current 1 μA typ. Driver Antenna Bridge 250 mA continuous Product Code 801101 Hard Tag Dimension 9.93 x 5.99 mm / 0.39 x 0.23 in Thickness 1.63 mm / 0.06 in Housing Material G 600 Color Black Operating -40 °C to 85 °C Temperature -40 °F to 185 °F Storage -40 °C to 90 °C Temperature -40 °F to 194 °F (max. 1000h)	Chip	ASIC
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Color Black Operating -40 °C to 85 °C Temperature -40 °F to 185 °F Storage -40 °C to 90 °C Temperature -40 °F to 194 °F (max. 1000h)	Thickness	1.63 mm / 0.06 in
Operating -40 °C to 85 °C Temperature -40 °F to 185 °F Storage -40 °C to 90 °C Temperature -40 °F to 194 °F (max. 1000h)	Housing Material	G 600
Temperature -40 °F to 185 °F Storage -40 °C to 90 °C Temperature -40 °F to 194 °F (max. 1000h)	Color	Black
Storage -40 °C to 90 °C Temperature -40 °F to 194 °F (max. 1000h)	Operating	-40 °C to 85 °C
Temperature -40 °F to 194 °F (max. 1000h)	Temperature	-40 °F to 185 °F
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Quantity / Package 2500 pcs / tape on reel	Temperature	-40 °F to 194 °F (max. 1000h)
	Quantity / Package	2500 pcs / tape on reel

Overview

Integrated PLL System
Multiple Transponder Protocol Compatibility
Internal and external clock source
2 channel demodulator for Zero crossing effect elimination
Simultaneous send / receive mode

Applications

Automotive immobilizers Industrial – general purpose AM readers

Contact information

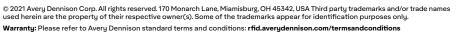
rfid.averydennison.com/contact

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Care and handling: RFID inlays are sensitive to ESD. Observe standard industry practices relating to electronics / RFID to keep environmental impact and static charge to a minimum.



Applications: This product should be tested by the customer / user thoroughly under end use conditions to ensure the product meets the particular requirements. Avery Dennison does not represent that this product is fit for any particular purpose or use. Avery Dennison reserves the right to modify, change, supplement or discontinue product offerings at any time without notice. The information contained herein is believed to be reliable but Avery Dennison makes no representation concerning the accuracy or correctness of the data.