LF Base Station IC TMS3705ADR



The LF base station IC TMS3705ADR allows efficient development and production of RFID readers for vehicle immobilizers. This base station IC drives the antenna of a TI-RFid transponder system to send data modulated on the antenna signal, and to detect and demodulate the response from the transponder. It allows also minimizing the external component count.

Key functions:
- Low current consumption in sleep mode
- Automatic transponder frequency measurement and adaptation
- Diagnosis function
- Full bridge antenna driver
- Built in band-pass filter and limiter
- Digital FSK demodulator
- High speed data transmission in synchronous mode
- Power on reset
- PLL
- Short circuit protection
- Support of all TI-RFID LF transponder functions

Specifications:

Part Number	RI-TMS3705ADR
Operating Frequency	Typical 134.2kHz, FSK
Operating Voltage	4.5V to 5.5V DC
Current Consumption	Charge Phase (without antenna load) typical 8 mA; max. 20mA Sleep Mode (without I/O currents) typical 15 µA; max. 0.2mA
Interface to Micro Controller	Two wire multifunctional serial interface, 15625 baud
Antenna Inductivity	400µH - 700µH recommended
ESD Protection (MILSTD 883, HBM)	-2000V to +2000V
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +100°C (125°C up to 1000hrs over lifetime)
Package / Pin count	SO 16 (10 mm x 6 mm)
Packing / Delivery	Tape on Reel, 2500 units per reel

For more information, contact the sales office or distributor nearest you. This contact information can be found on our web site at: **http://www.ti-rfid.com**

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