

Automotive Bi-directional ESD in DFN1006-2LW Package

The TESDA1L2B17P1Q1 is an ESD protection device for a single LIN bus signal line, providing robust protection against electrostatic discharge and transient surge events. Typical LIN applications include seat control, door locking, mirror adjustment, and sensor interfaces such as rain sensors.

The LIN bus uses a single-wire serial interface with data rates up to 20 kbit/s and operates near the vehicle supply voltage, typically 14.4V in a 12V automotive system. External ESD protection is recommended to improve module robustness, as the LIN line may be shorted to the battery and must withstand maximum battery voltage.



Official Website

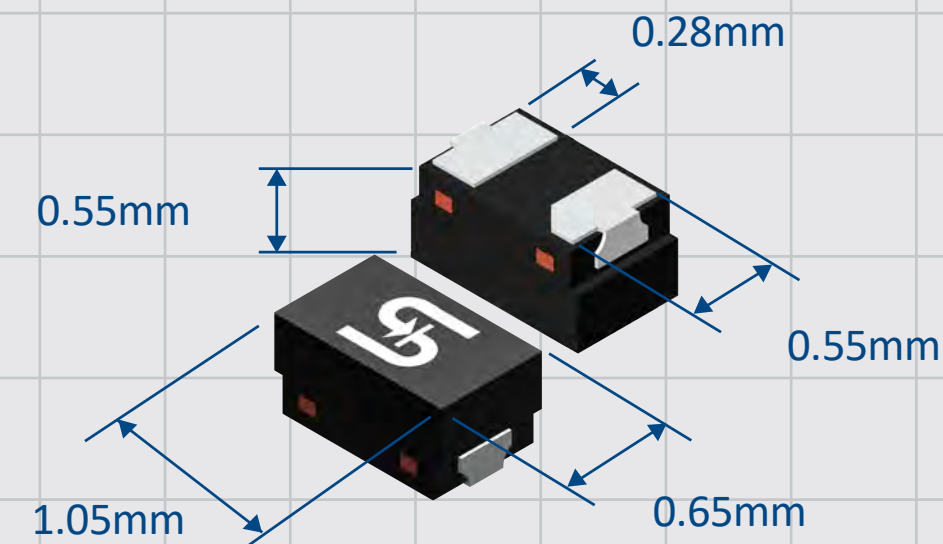


LinkedIn

For more information: marketing@ts.com.tw

© 2026 TAIWAN SEMICONDUCTOR, CO., LTD. ALL RIGHTS RESERVED.

PACKAGE

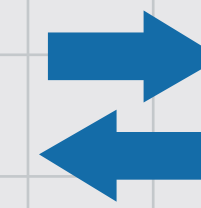


DFN1006-2LW

FEATURES



AUTOMOTIVE QUALIFIED AEC-Q101



ESD PROTECTION FOR 2 LINES WITH BIDIRECTIONAL CONFIGURATION



15V/24V AND BELOW OPERATING VOLTAGES

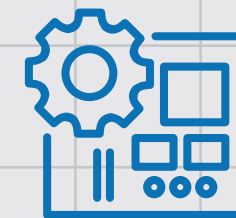


**PROTECTS I/O LINES
OR POWER LINES**

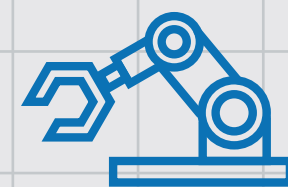
APPLICATIONS



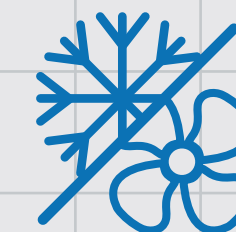
IN-VEHICLE NETWORK LINES



INDUSTRIAL CONTROL SYSTEMS



ROBOTIC ARM

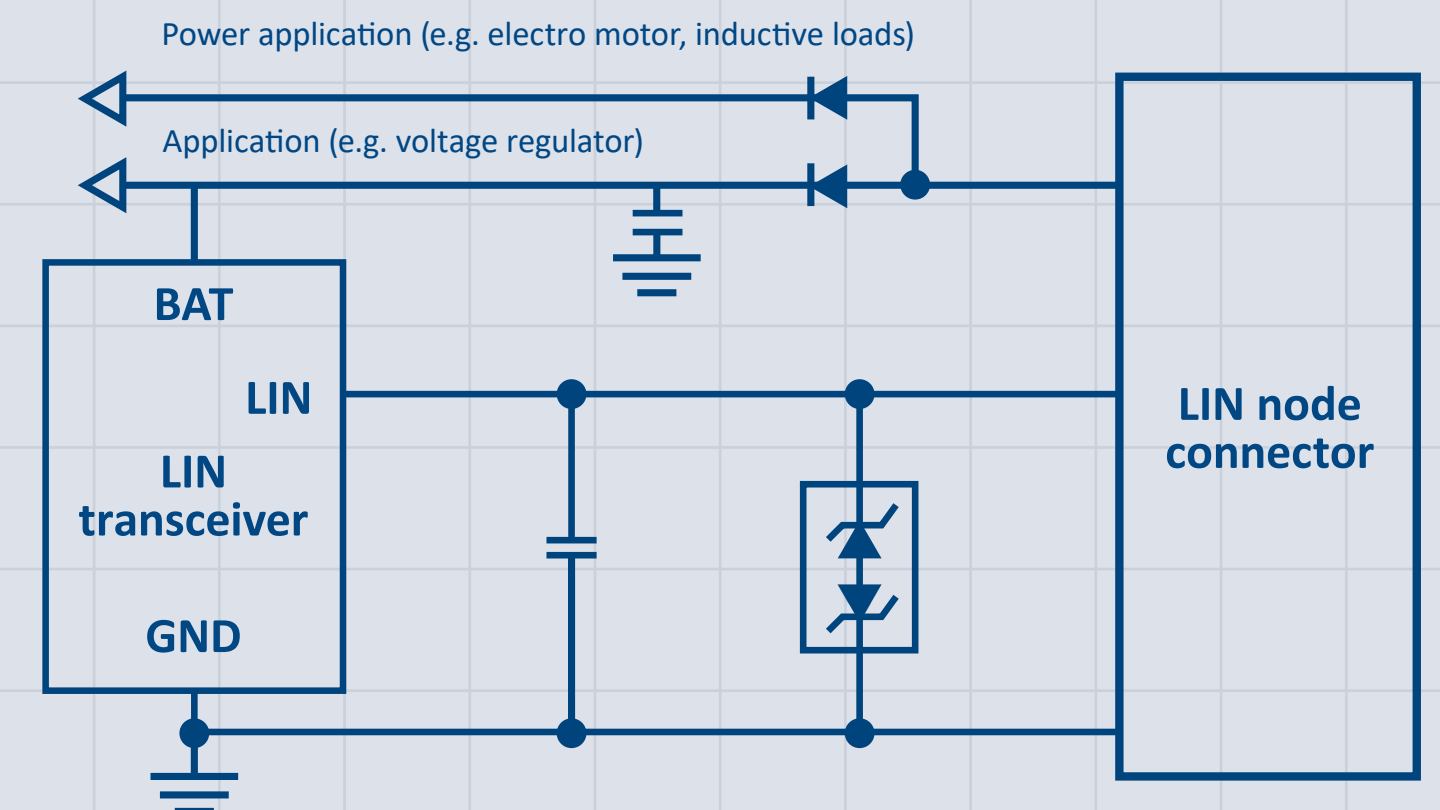


HVAC SYSTEMS

SPECIFICATION

Part number	V _{WM}	C _j max	ESD robustness (IEC61000-4-2)	IPPM (at tp= 8/20μs)
TESDA1L2B17P1Q1	15V/24V	17pF	30KV	3A

DFN1006-2LW Package and Typical Application for Automotive LIN Bus ESD Protection



TAIWAN SEMICONDUCTOR

www.taiwansemi.com