TLE55493iCD

Datasheet addendum

XENSIV™ dual die TMR wheel speed sensor

Features

- Two high performance ASICs integrated in one robust 4-pin package
- Slim and compact package offers mounting advantages compared to two single packages
- Valid and correct direction on first output protocol
- Product types offering high resolution protocols to detect smallest car movements
- High robustness against mechanical vibrations thanks to active vibration algorithm
- Advanced stop-start capabilities including no loss of direction information
- Robustness against external magnetic disturbances due to differential sensing principle
- ISO 26262 safety element out of context for safety requirements up to ASIL D

Potential applications

- Anti-lock braking system
- Indirect tire pressure monitoring system
- Hill holder & electronic parking brake
- Autonomous parking

AEC Qualified

RoHS

ISO 26262 compliant

Product validation

Product validation according to AEC-Q100, Grade 0. Qualified for automotive applications.

Description

This dual die datasheet addendum specifies additional parameters to the single die datasheet for the corresponding device. In case of any conflict between the single die datasheet and this addendum, this document has precedence.

Ordering Information

Name	Marking	Ordering Code	Package
TLE55493iCD-PW2-50	493D6E	SP005972687	PG-SSO-4-52
TLE55493iCD-LR	493D6A	SP005972683	PG-SSO-4-52
TLE55493iCD-LR-4H	493D6B	SP005972692	PG-SSO-4-52
TLE55493iCD-LR-6M	493D6C	SP005972696	PG-SSO-4-52
TLE55493iCD-LR-8H	493D6D	SP005972700	PG-SSO-4-52

Table of contents

1 Pin configuration

Pin No.	Symbol	Function
1	V_{DD1}	Supply voltage die 1
2	GND_1	Ground die 1
3	V_{DD2}	Supply voltage die 2
4	GND_2	Ground die 2

2 Parametric characteristics

Table 1 Parametric characteristics

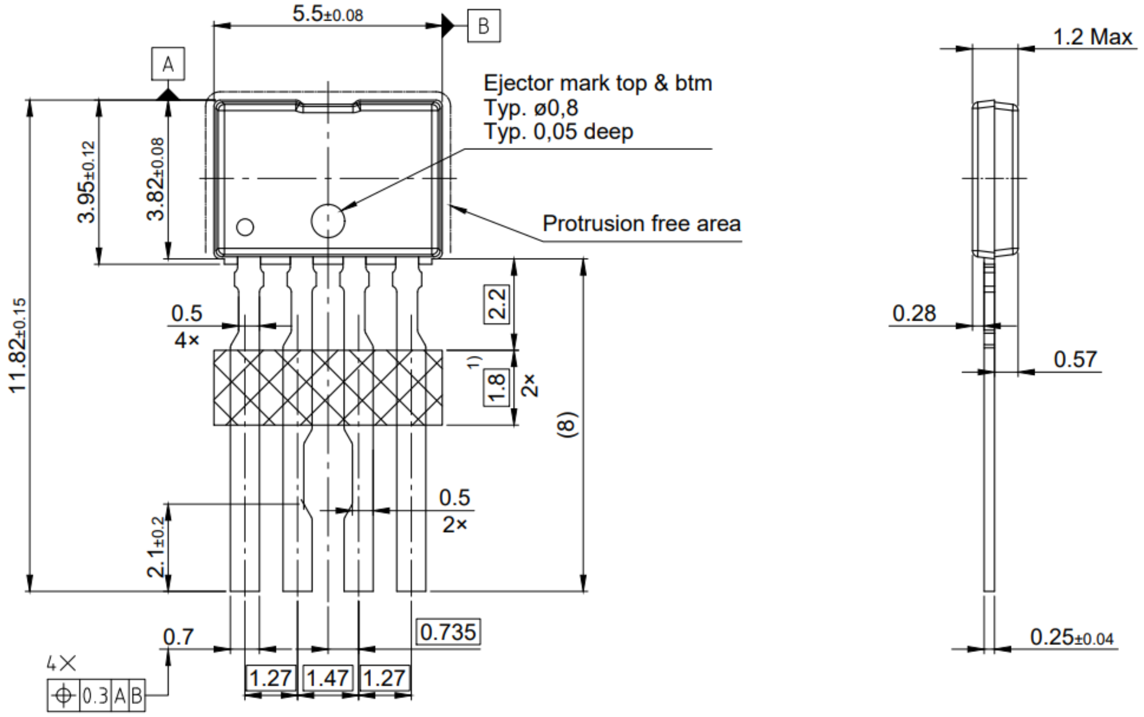
Parameter	Symbol	Values			Unit	Note or condition
		Min.	Typ.	Max.		
Thermal resistance	R_{th}	-	150	190	K/W	junction-to-ambient, PG-SSO-4-52 package

3 Package

By following our application note "Recommendation for Handling and Assembly of Infineon PG-SSO Sensor Packages" the sensor terminals can be bent without causing incipient cracks influencing the sensor element function, please contact your key account team for further information. The Product is RoHS (restriction of hazardous substances) compliant when marked with letter H (or G) in front or after the data code marking and contains a data matrix code. Please refer to your key account team or regional sales if you need further information.

Parameter	Material
Lead frame	CuCrSiTi (Cu alloy according to C18070)
Lead plating	Sn

TLE55493iCD is delivered in blister packing.



Outer dimension does not include protrusion or intrusion of 0.15 max. per side
1) Narrowing of leads to 0.5 only allowed outside of this area
All dimensions are in units mm
The drawing is in compliance with ISO 128-30, Projection Method 1 [⊲⊕]
Drawing according to ISO 8015, general tolerances ±0.05 ±2°

Figure 1 **PG-SSO-4-52 package outline**

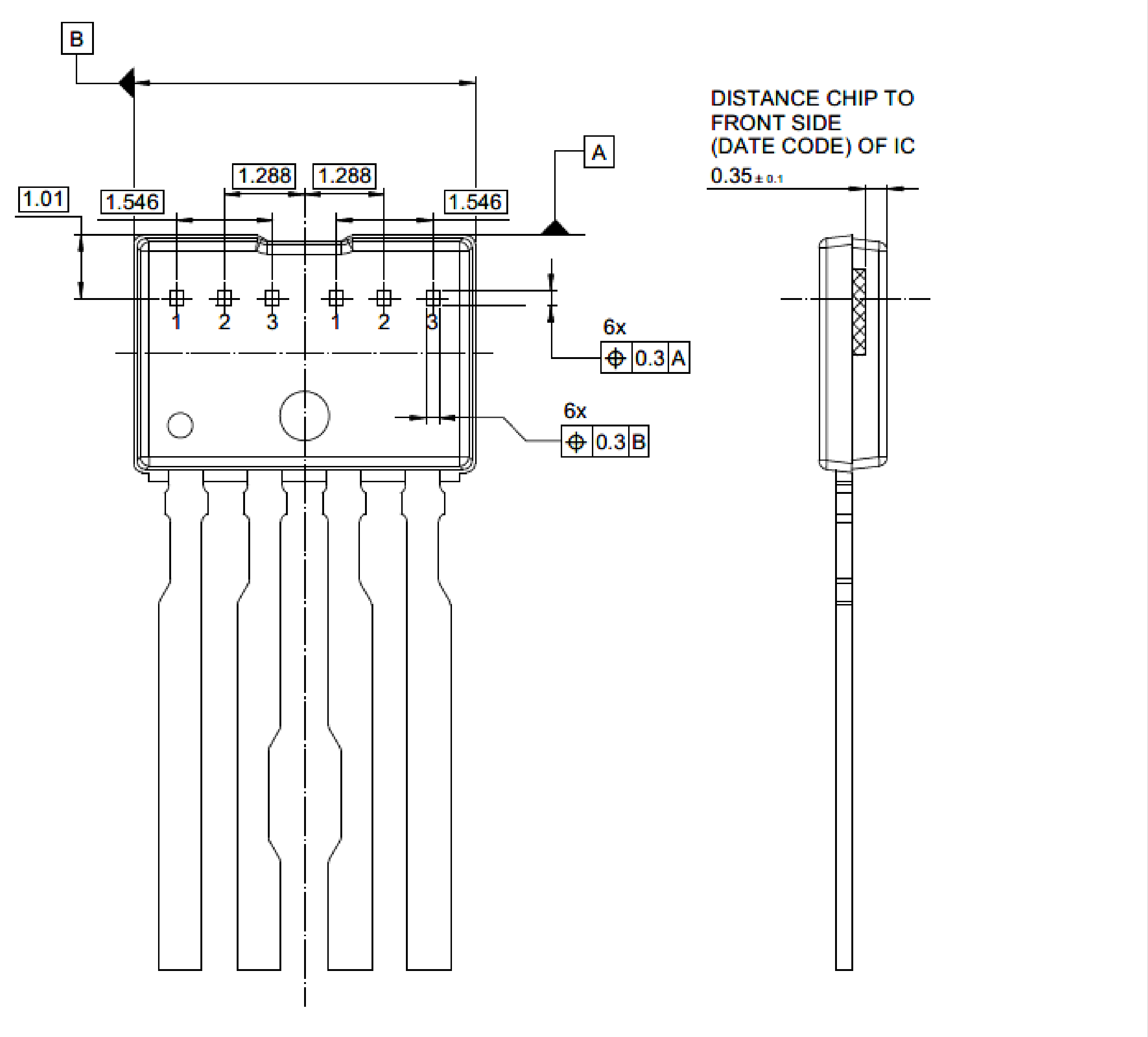


Figure 2 PG-SSO-4-52 package sensing element location

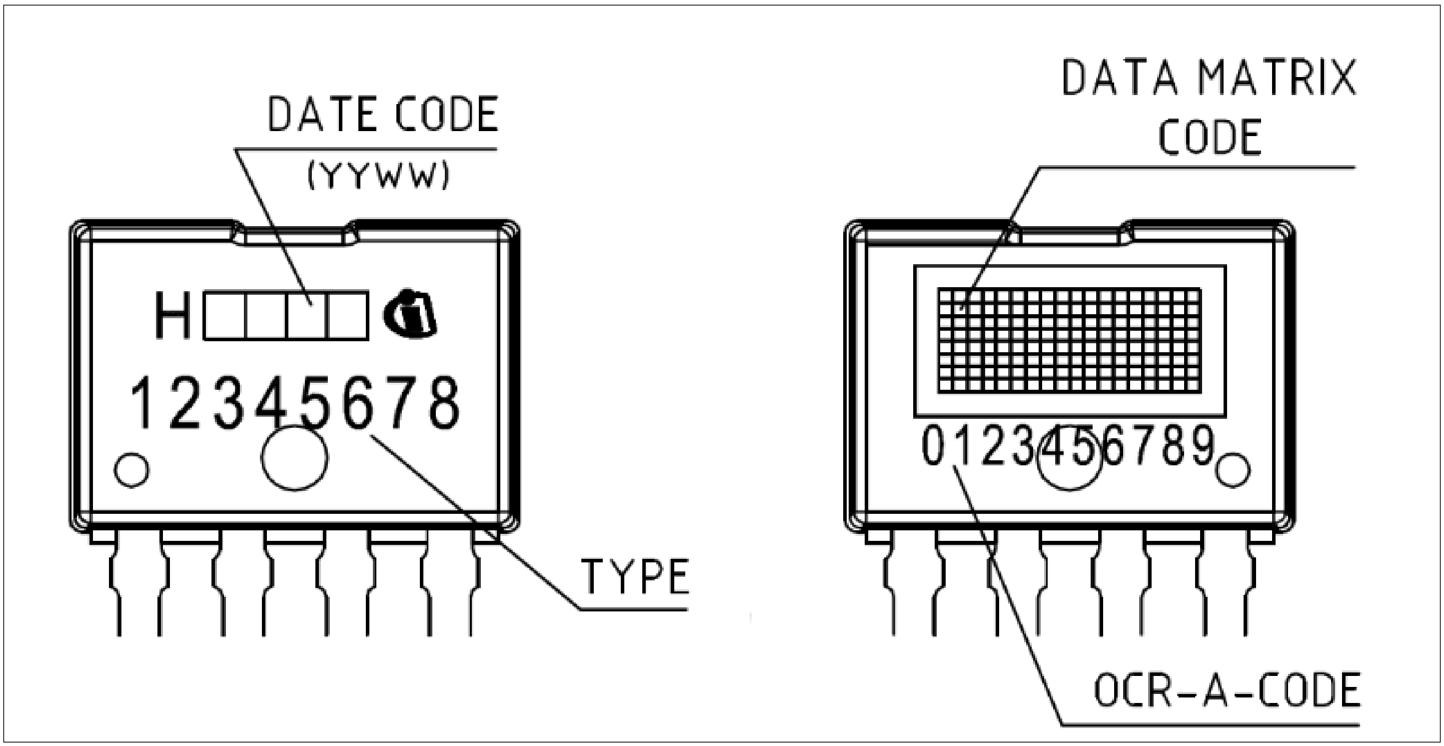


Figure 3 **PG-SSO-4-52 package marking on front (left) and rear side (right)**

4 Revision history

Table 2 **Revision History**

Date	Version	Change Description
2025-12-02	1.00	Initial data sheet
2025-12-09	1.01	Editorial change on first page
2026-01-14	1.02	Classification set to "public"
2026-02-24	1.03	Product variants added (change on first page)

Document number: Z8F80869535

Trademarks

All referenced product or service names and trademarks are the property of their respective owners.

Edition 2026-02-24
Published by
Infineon Technologies AG
81726 Munich, Germany

© 2026 Infineon Technologies AG
All Rights Reserved.

Do you have a question about any aspect of this document?

Email: erratum@infineon.com

Document reference
IFX-jobid__20260224153335132_LastLeaf2

Important notice

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffenheitsgarantie").

With respect to any examples, hints or any typical values stated herein and/or any information regarding the application of the product, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

In addition, any information given in this document is subject to customer's compliance with its obligations stated in this document and any applicable legal requirements, norms and standards concerning customer's products and any use of the product of Infineon Technologies in customer's applications.

The data contained in this document is exclusively intended for technically trained staff. It is the responsibility of customer's technical departments to evaluate the suitability of the product for the intended application and the completeness of the product information given in this document with respect to such application.

Warnings

Due to technical requirements products may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by Infineon Technologies in a written document signed by authorized representatives of Infineon Technologies, Infineon Technologies' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.