

# **Data Sheet Supplement** Version 1.0

# Dynamic Differential Hall Effect Sensor TLE4928C E6547

For all parameters not specified in this document the TLE4926C-HT E6547 data sheet is valid.



Туре	Marking	Ordering Code	Package	
TLE4928C E6547	28D8	SP000718274	PG-SSO-3-92	



## 1.1 Absolute Maximum Ratings

No.	Parameter	Symbol	min.	typ.	max.	Unit	Conditions
1.1.1	Junction temperature	Tj	-40			°C	-
					155	°C	2000 h (not additive)
					165	°C	1000 h (not additive)
					175	°C	168 h (not additive)
					195	°C	3x1 h (additive to the other life times).

## 1.2 Operating Range

No.	Parameter	Symbol	min.	typ.	max.	Unit	Conditions
1.2.1	Operating junction	Tj	-40			°C	-
	temperature				155	°C	2000 h (not additive)
					165	°C	1000 h (not additive)
					175	°C	168 h (not additive) reduced signal quality permittable (e.g. jitter).
1.2.2	Power on time	t <sub>on</sub>			1	ms	Time to achieve specified accuracy After power on the output of the IC is always in high-state. After internal resets output is locked <sup>1</sup> .

#### 1.3 AC/DC Characteristics

Note: Not part of production testing, verified by design and characterization.

No.	Parameter	Symbol	min	typ	max	Unit	Remarks
1.3.1	Frequency range	f	0.006		8	kHz	Operation below 6Hz <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Output of the IC is locked in present state (high-state or low-state) after an internal reset is launched. This reset happens typically every 195ms when there is no output switching in either case. See also 1.3.2. A voltage reset causes a release of the output and output is in high state after power on again.

<sup>&</sup>lt;sup>2</sup> Output will switch if magnetic signal is changing more that  $2x |\Delta B_{min}|$  within offset recalibration time even below 6Hz once per magnetic edge, increased phase error is possible.



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1.3.2	Offset recalibration time after last output change	t <sub>reset</sub>	165	195	225	ms	Valid for calibrated mode
							Output locked to state
							before recalibration



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Revision History: November 2009 Version 1.0

Previous Version: -				
Page	Subjects (major changes since last revision)			
-	-			

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