

Data Sheet Supplement Version 1.0

Dynamic Differential Hall Effect Sensor TLE4924C-1 E6547

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



Туре	Marking	Ordering Code	Package	
TLE4924C-1 E6547	24D81	SP000718170	PG-SSO-3-92	



1. Absolute Maximum Ratings

Parameter	Symbol	min.	typ.	max.	Unit	Conditions
Junction	T _j	-40			°C	-
temperature				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).

2. Operating Range

Operating junction	T _j	-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).

3. AC/DC characteristics in Running Mode

Over operating range, unless otherwise specified. Typical values correspond to V_S=12V and T_A=25°C

delay time	t _d	7	12.5	18	μs	Only valid for Tj=25°C.
Falling edge				20 ¹	μs	-
Rising edge				25 ²		Tj=-40°C -Tj=175°C
						Tj=-40°C -Tj=175°C
						Higher magnetic
						slopes and overshoots
						reduce t _d , because the
						signal is filtered
						internal.3

only valid for the falling edge.

Not subject to production test-verified by design/characterisation
measured with a sinusoidal-field with 10mTpp and a frequency of 1kHz.



4. Magnetic Characteristics in Running Mode

Minimum signal	$ \Delta B_{min} $	0.85	1.4	1.95	mT	
amplitude						



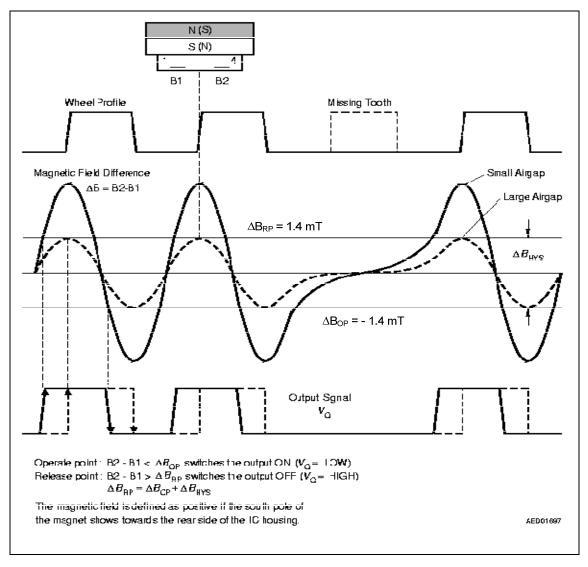


Figure 1 System operation with visible fixed hysteresis



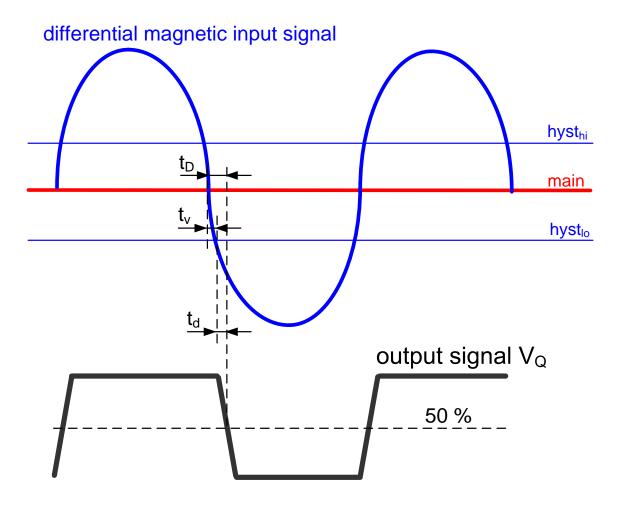


Figure 2 Delay time definitions

 $t_D = t_v + t_d$

 t_D = Delay defined from diff_B = 0 to 50 % of output edge

t_d = Delay on signal path

t_v = Systematic delay because of visible hysteresis concept

t_v is a function of the magnetic signal amplitude and frequency



Revision History: November 2009 Version 1.0

Previous Version: -		
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Sensors@infineon.com