Data Sheet Supplement
Version 3.0 (valid for 8” product)

Dynamic Differential Hall Effect Sensor TLE4926C-HT E6747

For all parameters not specified in this document the TLE4925C data sheet is valid.

Type	Marking	Ordering Code	Package
TLE4926C-HT E6747	26C8A	SP000269345	PG-SSO-3-9

1Package

- 47nF capacitor[1] between V_S and GND needed for micro cuts in power suply using existing P-SSO-3-9 package.

2 Absolute Maximum Ratings

Parameter	Symbol	min.	typ.	max.	Unit	Conditions
Junction temperature	T_j	-40			°C	-
				155	°C	5000 h (not additive)
				165	°C	2500 h (not additive)
				175	°C	500 h (not additive)
				195	°C	10x1 h (additive to the other life times).

3 Operating Range

Parameter	Symbol	min.	typ.	max.	Unit	Conditions
Operating junction temperature	T_j	-40			°C	-
				155	°C	5000 h (not additive)
				165	°C	2500 h (not additive)
				175	°C	500 h (not additive) reduced signal quality permittable (e.g. jitter).

[1] value of capacitor: 47nF±10%; (excluded drift due to temperature and over lifetime); ceramic: X7R; maximum voltage: 50V.

4 Electro Magnetic Compatibility – (values depend on R_{Series})

Ref. ISO 7637-2; see test circuit of figure 15;

ΔB_{PP} = 10mT (ideal sinusoidal signal); V_S=13.5V ± 0.5V, f_B= 1000Hz; T= 25°C; $R_{Series} \geq 200\Omega$;

No.	Parameter	Symbol	Level/typ	Status
1.2.1	Testpulse 1	V_{EMC}	III / -90V	C
	Testpulse 2		III / 40V	A[1]
	Testpulse 3a		IV / -150V	A
	Testpulse 3b		IV / 100V	A
	Testpulse 4		IV / -7V	A
	Testpulse 5		III / 66.5V	C

Note: Test criteria for status A: No missing pulse no additional pulse on the IC output signal plus duty cycle and jitter are in the specification limits.
Test criteria for status B: No missing pulse no additional pulse on the IC output signal. (Output signal "OFF" means switching to the voltage of the pull-up resistor).
Test criteria for status C: One or more parameter can be out of specification during the exposure but returns automatically to normal operation after exposure is removed.
Test criteria for status E: IC destroyed.

Ref. ISO 7637-3; TP 1 and TP 2 ref. DIN 40839-3; see test circuit of figure 15;

ΔB_{PP} = 10mT (ideal sinusoidal signal); V_S=13.5V ± 0.5V, f_B= 1000Hz; T= 25°C; $R_{Series} \geq 200\Omega$;

No.	Parameter	Symbol	Level/typ	Status
1.2.2	Testpulse 1	V_{EMC}	IV / -30V	A
	Testpulse 2		IV / 30V	A
	Testpulse 3a		IV / -60V	A
	Testpulse 3b		IV / 40V	A

Ref. ISO 11452-3; see test circuit of figure 15; measured in TEM-cell

ΔB_{PP} = 4mT (ideal sinusoidal signal); V_S=13.5V ± 0,5V, f_B= 200Hz; T= 25°C; $R_{Series} \geq 200\Omega$;

No.	Parameter	Symbol	Level/max	Remarks
1.2.3	EMC field strength	$E_{TEM-Cell}$	IV / 200V/m	AM=80%, f=1kHz;

Note: Stresses above those listed here may cause permanent damage to the device. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.
Test condition for the trigger window: $f_{B-field}$=200Hz, B_{pp}=4mT, vertical limits are ±200mV and horizontal limits are ±200µs.

[1] Valid for general function, current consumption and jitter may be out of spec during test pulse 2.

Revision History: **April 2007** Version 3.0

Previous Version: 2.0	
Page	Subjects (major changes since last revision)
1	Data sheet is valid for 8” products
1	Ordering code added
3	EMC performance conducted pulses ISO7637-1 TP1 and TP5 updated

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