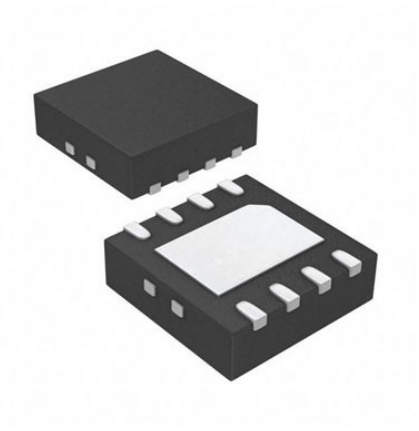
TLI4971A050T5UE0001XUMA1

Data Sheet

Manufacturers	Infineon Technologies Corporation
Package/Case	PG-TISON-8
Product Type	
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for TLI4971A050T5UE0001XUMA1 or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The Infineon XENSIVTM TLI4971-A050T5-E001 is a new sensor, pre-programmed to the 50A measurement range. In applications with medium currents, this coreless magnetic current sensor solution is usable for AC and DC measurements. Due to its 240kHz bandwidth the fast analog interface and dual fast over-current detection as well as the high precision current measurement ensures high flexibility in many application use cases. Infineon's well-established and robust Hall technology enables accurate and highly linear measurement of currents with a full measurement range up to ±50A full scale range. All negative effects (saturation, hysteresis) commonly known from sensors using flux concentration techniques are avoided.

The digitally assisted analog concept of TLI4971 offers superior stability over temperature and lifetime thanks to the proprietary digital stress and temperature compensation. The differential measurement principle allows great stray field suppression for operation in harsh environments.

We offer two derivatives:

TLI4971-A050T5-U-E0001 with 50A measurement range, UL certified device

TLI4971-A050T5-E0001 with 50A measurement range

Integrated current rail with typical 225µΩ insertion resistance enables ultra-low power loss

SMD package with very small form factor, 8x8mm for easy integration and board area saving

Single supply voltage, 3.1V to 3.5V

Highly accurate, scalable, DC & AC current sensing

Typical bandwidth of 240kHz

Very low sensitivity error over temperature (max. 2.5%)

Excellent stability of offset over temperature and lifetime

High robustness to voltage slew rates up to 10V/ns

Galvanic functional isolation up to 1150V peak VIORM. Partial discharge capability of at least 1200V. 4mm clearance and creepage.

Differential sensor principle ensures superior magnetic stray field suppression

Two independent fast Over-Current Detection (OCD) pins with configurable thresholds enable protection mechanisms for power circuitry (typical 0,7µs)

T_S: -40…+105°C

Precalibrated sensor

Electrical drives (up to 690V)

Photovoltaic Inverter

General purpose inverters

Overload and over-current detection

Current monitoring

Chargers

Power supplies

Features

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Precalibrated sensor

Application

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Photovoltaic Inverter

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Related Products

TLE4262

Infineon Technologies Corporation

SOP14

TLE7183QU

Infineon Technologies Corporation

PG-TQFP-48

TLE8242-2L

Infineon Technologies Corporation

LQFP64

TLE52052G

Infineon Technologies Corporation

DC0831

TLE4961-1M

Infineon Technologies Corporation

SOT23-3

TLE8209-1E

Infineon Technologies Corporation

HSOP-20

TLE8457CLE

Infineon Technologies Corporation

TLE72092R

Infineon Technologies Corporation

HSOP20