

TLI4971A075T5E0001XUMA1

Data Sheet

Manufacturers <u>Infineon Technologies Corporation</u>

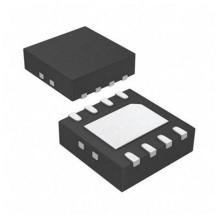
Package/Case

PG-TISON-8

Product Type

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for TLI4971A075T5E0001XUMA1 or <u>Fmailto:ssales@ovaga.com</u> We will contact you in 12 hours.

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General Description

The Infineon XENSIV TM TLI4971-A075T5-E001 is a new pre-programmed 75A sensor. The high precision current measurement serves applications with medium to high currents. Due to the coreless magnetic current sensing principle, saturation or hysteresis effects commonly known from sensors using flux concentration techniques are avoided. The analog interface and dual fast over-current detection pins with a reaction time of less than 1 μ s ensures a safe operation of the applications. Infineon's well-established and robust Hall technology enables accurate and highly linear measurement of AC and DC currents with a full measurement range up to ± 75 A full scale range. d. The current sensor is equipped with internal self-diagnostic feature.

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-A075T5-U-E0001 with 75A measurement range, UL certified device

TLI4971-A075T5-E0001 with 75A measurement range

Integrated current rail with typical $225\mu\Omega$ 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 $0.7\mu s$)
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

Related Products



TLE4262

Infineon Technologies Corporation SOP14



TLE8242-2L

Infineon Technologies Corporation LQFP64



TLE4961-1M

Infineon Technologies Corporation SOT23-3



TLE7183QU

Infineon Technologies Corporation PG-TQFP-48

Application

690V)

detection

Chargers

Power supplies

Electrical drives (up to

Photovoltaic Inverter

General purpose inverters

Overload and over-current

Current monitoring



TLE52052G

Infineon Technologies Corporation DC0831



TLE8209-1E

Infineon Technologies Corporation HSOP-20



TLE8457CLE
Infineon Technologies Corporation



TLE72092R
Infineon Technologies Corporation
HSOP20