Optocoupler Model Specifications Table

AI Overview

Optocouplers are specified by parameters such as input/output type, current transfer ratio, isolation voltage, propagation delay, and package type, which are detailed in datasheets and SPICE models.Key Optocoupler SpecificationsModelInput TypeOutput TypeCTR (%)Isolation Voltage (Vrms)Propagation Delay (ns)Package TypeNotes4N25IR LEDPhototransistor20–30050003–56-pin DIPStandard general-purpose optocoupler, widely used in digital isolation 4N32IR LEDPhototransistor50–60050005–106-pin DIPHigher CTR, suitable for low-current applications 4N47AIR LEDPhototransistor50–600500076-pin DIPOptimized for linear applications, includes temperature compensation 4N48AIR LEDPhototransistor50–60050007.56-pin DIPSimilar to 4N47A, slightly higher CTR and improved linearity 4N49AIR LEDPhototransistor50–6005000126-pin DIPHigh CTR, suitable for analog signal isolation HCNR200AlGaAs LEDDual PhotodiodesN/A5000N/A8-pin DIPHigh-linearity analog optocoupler, excellent for precision analog isolation HCNR201AlGaAs LEDDual PhotodiodesN/A5000N/A8-pin DIPSimilar to HCNR200, non-RoHS compliant option available BPW32IR LEDPhotodiodeN/AN/AN/AThrough-holePhotodiode-based optocoupler for light sensing applications Important Parameters ExplainedCurrent Transfer Ratio (CTR): Ratio of output current to input LED current, indicating efficiency of signal transfer .Isolation Voltage: Maximum voltage the optocoupler can safely isolate between input and output circuits .Propagation Delay: Time taken for a signal to pass from input to output, critical for high-speed digital applications .Package Type: Determines mounting style (DIP, SMD) and footprint compatibility .Timing Parameters: Rise and fall times, important for digital communication and switching speed .Temperature Ratings: Operating and storage temperature ranges ensure reliability in industrial environments .Regulatory Compliance: UL, VDE, IEC certifications indicate safety an...

Article Content

6N137 Optocoupler SPICE Model Datasheet | Vishay

Datasheet for Vishay''s 6N137 series optocouplers with SPICE models, parameters, and simulation setups. High-speed optocoupler information.

markets and applications. | Optocoupler Product Selector Guide

Skyworks Solutions, through its wholly-owned subsidiary Isolink, provides upscreened and hermetically sealed high-reliability optocouplers, RF diodes and RFICs including multi-chip modules (MCM) for

Optocoupler Datasheets and Equivalents | PDF

Optocoupler Datasheets and Equivalents This document provides a cross reference of part numbers for various manufacturers of photo couplers. It includes

Optocoupler Datasheet: Comprehensive Guide with

These comprehensive documents provide engineers and designers with a wealth of technical information, detailing the specifications, characteristics, and

Optocoupler, Phototransistor Output, with Base Connection

Comliance to DIN EN 60747-5-5 partial discharge isolation specification is available for these families by ordering option 1. These isolation processes and the Vishay ISO9001 quality program results in the

Optocoupler

To help you choose and design with Agilent Technologies isolation components, this Designer''s Guide contains popular application circuits and recommended Agilent optocouplers.

High Speed Optocoupler, 5 MBd

DESCRIPTION This 5 Mbd family is an industry standard optocoupler with a high efficient LED as input and an integrated photo detector as output. The detector incorporates a Schmitt-Trigger stage to

Explanation of Photocoupler / Optocoupler Specifications

General specifications for various usage environments including absolute maximum ratings and electrical characteristics are available for Renesas photocouplers.

High Speed Optocoupler, 10 MBd

DESCRIPTION The 6N137, VO2601, VO2611 are single channel 10 MBd optocoupler utilizing a high efficient input LED coupled to a high speed integrated photo-detector logic gate with a strobable

PC817 Datasheet, Pinout, Circuits and Equivalent

The PC817 optocoupler protects sensitive electronics from voltage spikes and noise. With a collector-emitter voltage up to 80V, isolation voltage of

Spice-Model-Collections/OptoCouplers Models at main

* Models photon generation: same as MainLED except no AC effects, no breakdown. * as the transistor is electrically available. * Use beta variation (w/Parts) to model change in current-transfer ratio

Optocoupler ICs: Applications and Component Selection

Important Optocoupler IC Specifications You''ll likely start by looking at mounting style for optocoupler ICs; they are available in through-hole DIP packages or as surface-mount components.

Reference Tables

Solutions as Easy as 1-2-3 Quickly select the right optocoupler for your application. We made it as simple as 1-2-3 regardless if you are a seasoned engineer or novice.

High Speed Optocoupler, Single and Dual, 10 MBd

10 MBd optocouplers utilizing a high efficient input LED coupled with an integrated optical photodiode IC detector. The detector has an open drain NMOS-transistor output, providing less leakage compared

SELECTION GUIDE Optoisolation and Optical Sensor Products

Multi-Channel Bi-Directional Digital Optocoupler Description multi-channel and bidirectional, high-speed optocouplers. Integration of multiple optocouplers in monolit ic form is achiev-ed through patented

Optocouplers Guide: Understanding Types,

Learn how optocouplers ensure electrical isolation and signal transfer in circuits. This guide covers their components, working principles, and applications.

Optocouplers Desig

Although product information and illustrations in this guide were current at the time it was approved for print-ing, Avago Technologies, in a continuing efort to ofer excellent products at a fair value, reserves

6N137 series Product Data Sheet Photocoupler

The Optocoupler operational parameters are guaranteed over the temperature range from -40oC ~ +85oC.

6N137 Optocoupler Pinout, Equivalent, Features & Datasheet

Features and Specifications High Speed Optocoupler (10Mbit/s) Maximum Supply voltage: 7V (Typically 5V) Input forward voltage: 1.1V to 1.7V Minimum Logic high voltage: 2V

PC817 Series

“ In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that occur in equipment using any of SHARP''s devices, shown in catalogs, data books, etc.

PC817 Optocoupler: Pinout, Specifications, Circuits and Datasheet

The PC817 optocoupler is a fundamental component in electronic circuits, seamlessly integrating an infrared emitting diode (IR LED) and a phototransistor to establish an optical linkage

Using Spice/PSpice (Vishay optocoupler) models in LTSpice

If you want to have several related models (ones that use the same symbol without confusion, but perhaps have either different approaches or else somewhat different behaviors), you can add them

Optocoupler Datasheet: Comprehensive Guide with Specifications and ...

These comprehensive documents provide engineers and designers with a wealth of technical information, detailing the specifications, characteristics, and performance parameters of each

Phototransistor Optocouplers: Understanding & Design

APPLICATION NOTE ANO007 | Understanding Phototransistor Optocouplers Eleazar Falco 01. INTRODUCTION An optocoupler, also known as photocoupler

Optoisolation and Optical Sensor Products

Multi-Channel Bi-Directional Digital Optocoupler Description d bidirectional, high-speed optocouplers. Integration of multiple optocouplers in monolithic form is achi v-ed through patented process

Guidelines for reading an optocoupler datasheet

Optocoupler devices are renowned for their high reliability in the areas of isolation and safety. The safety and insulation ratings table serves as a quick reference for all key parameters the device is qualified for.

Everything You Need to Know About Optocouplers in Electronics

Have you ever heard the word isolation, especially in electronics? As you might guess, isolation is a key factor when it comes to optocouplers. Isolation is sometimes mandatory and

Guidelines for Reading an Optocoupler Datasheet

The electrical characteristics table in figure 5 provides information on key parameters for the input side, the output side, and the coupling itself. It provides the minimum, typical, and maximum values for a

Optocoupler Product Catalogue

Our screening facilities and test capabilities include: . Ceramic and metal product design. We would welcome the opportunity to discuss how we can help you achieve your custom design requirements.

HCNR200 and HCNR201: High-Linearity Analog Optocouplers Data

Figure 21 is the net list of a SPICE macro-model for the HCNR200/201 high-linearity optocoupler. The macro-model accurately reflects the primary characteristics of the HCNR200/201 and should

Contact Us

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