

Parameters of Optical Coupler 357



Article Overview

The 357 series optical coupler is a 4-pin phototransistor optocoupler with an isolation voltage of up to 3750–3700 V RMS, designed for low-voltage signal isolation.

Key Specifications

- Type: Phototransistor optocoupler (LED input, NPN phototransistor output) ()
- Package: SOP-4 (Small Outline Package, 4 pins) ()
- Number of Channels: 1 channel ()
- Input LED Forward Voltage (Vf): Typically around 1.2–1.4 V at 10–20 mA forward current ()
- Input Forward Current (If): Maximum 50 mA, typical operation 10–20 mA ()
- Output Collector-Emitter Voltage (Vce): Maximum 35–80 V depending on model ()
- Current Transfer Ratio (CTR): Typically 50–600% depending on operating conditions ()
- Isolation Voltage: Up to 3750 V RMS (EL357) or 3.7 kV (PC357) between input and output ()
- Operating Temperature Range: -55°C to +100°C ()
- Storage Temperature Range: -55°C to +125°C ()
- Switching Time: Rise time ~3 μ s, fall time ~3 μ s typical ()

Pin Configuration (SOP-4)

- Pin 1: Anode of LED
- Pin 2: Cathode of LED
- Pin 3: Collector of phototransistor...

Article Content

May 03, 2026

Optical Coupler

6.1.2.3 The optical coupler Due to the circuit cannot support the large load voltage, an optical coupler is used to protect the controller

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PC357NJ0000F Sharp Microelectronics | Mouser

PC357NJ0000F Sharp Microelectronics Transistor Output Optocouplers Photocoupler DC Input datasheet, inventory, & pricing.

Apr 28, 2026

357 Optocoupler Datasheet: A Comprehensive Review and

What is the 357 optocoupler datasheet? It provides key specifications like isolation voltage, CTR, and temperature range, essential

Dec 15, 2025

ANO007 | Understanding Phototransistor Optocouplers

01. INTRODUCTION An optocoupler, also known as photocoupler or opto-isolator, is a device which can transfer an electrical signal

Feb 19, 2026

PC357 Datasheet (PDF)

Input-output isolation voltage (rms) is 3.75kV. Collector-emitter voltage is 80V (*) and CTR is 50% to 600% at input current of 5mA.

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Everything You Need to Know About Optocouplers in Electronics

This optical coupling allows the input and output circuits to remain electrically isolated from each other, protecting

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Opto-isolator

An opto-isolator contains a source (emitter) of light, almost always a near infrared light-emitting diode (LED), that converts electrical

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CT357 Series DC Input 4-Pin Mini-Flat DMC-Isolator Phototransistor ...

The CT357 series of general purpose optocoupler consists of a photo transistor optically coupled to an Infrared-emitting diode in a 4

Sep 07, 2025

A Review of Optical Coupler Theory, Techniques, and Applications

The theory of coupling between different media is well-established, however the field of coupler design is perpetually adapting and

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BSc Chemistry

Distribution of optical signals to more than one station is not so simple and hence we cannot simply connect a few fibers. To

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RELIABILITY TEST

In compliance with RoHS, REACH standards MSL Class I Instructions The OR-357-S series device consists of an infrared led, photo

Jun 17, 2026

A Review of Optical Coupler Theory, Techniques, and Applications

Using particle swarm optimization, we optimize design parameters of multiple coupling regions and asymmetric

May 15, 2026

Optical Couplers | Springer Nature Link

Optical couplers are one of the most important classes of integrated optical components. These devices are used in

Oct 11, 2025

EL357 Optocoupler – Transistor Output – Electronics Guide

This tutorial we will see all about EL357 optocoupler IC Compact 4 Pin SOP IC. EL357 is a DC Input based,

Nov 22, 2025

PC357NJ0000F Sharp

Find the best pricing for Sharp PC357NJ0000F by comparing bulk discounts from 8 distributors. Octopart is the world's source for

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PC357 Datasheet (PDF)

Sharp Corporation is a Japanese electronics company that was founded in 1912. The company provides a wide range of products

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140357145200 Datasheet WL-OCPT Optocoupler Phototransistor

The typical and/or calculated values and graphics of technical parameters can only reflect statistical figures. The actual parameters of

Aug 20, 2025

PC357NJ0000F SHARP

SHARP PC357NJ0000F | Optocoupler; SMD; Ch: 1; OUT: transistor; Uinsul: 3.75kV; Uce: 80V - This product is available in Transfer

Jul 28, 2025

PC357 Datasheet, PDF

PC357 Datasheet. Part #: PC357. Datasheet: 741Kb/15P. Manufacturer: Sharp Corporation. Description: DEVICE SPECIFICATION

Sep 27, 2025

Technical series data sheet

Types: The WE 357 series combine an infrared LED and phototransistor. Both parts are optically coupled and provided in a plastic

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Directional Coupler

Directional coupler is a basic function in an integrated photonic circuit, in which energy of the optical signal is coupled

Jan 23, 2026

The DatasheetArchive

Mini-flat package General purpose Photo Coupler KPC357NT Features Opaque type, mini-flat package. Subminiature type (The

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EL357N-C Phototransistor Opto-Coupler SOP-4

EL357N-C Phototransistor Opto-Coupler SOP-4 is a compact and highly reliable solution for achieving electrical isolation between

Aug 30, 2025

SOP4, DC Input Photo Transistor Coupler

Description The UMW357 series combine an AlGaAs infrared emitting diode as the emitter which is optically coupled to a silicon

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China Smd 357 Optocoupler Manufacturers and Suppliers

Kento Electronic is one of the professional optics and optoelectronics manufacturers and suppliers in China. Here we bring you the

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DPC357S-X: Photocoupler Series (DPC357S-X)

Feature (s) Current Transfer Ratio (CTR: min 50% at $I_F = 5\text{mA}$, $V_{CE} = 5\text{V}$) High Input-Output Isolation Voltage ($V_{iso} = 3750\text{Vrms}$)

Oct 24, 2025

ED357 Datasheet PDF

The ED357 is a phototransistor optocoupler consisting of an infrared LED optically coupled to a silicon NPN

Dec 01, 2025

pc357nj0000f_e

It is packaged in a 4-pin Mini-flat package. Input-output isolation voltage(rms) is 3.75kV. Collector-emitter voltage is 80V and CTR is

Jun 27, 2026

Fiber Coupler

This coupling of input signal takes place due to the overlapping of the fundamental optical modes between the core-cladding

Contact Us

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