

Optocoupler Drive Push-Pull 1-CH 30V 1500V 8-Pin SO Tube



Images are for reference only

[Inquiry](#)

Manufacturer: [Broadcom Corporation](#)

Package/Case: DIPSOP

Product Type: Optoelectronics

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The ACPL-K342/ACPL-H342 contains an AlGaAs LED, which is optically coupled to an integrated circuit with a power output stage. This optocoupler is ideally suited for driving power IGBTs and MOSFETs used in motor control inverter applications. The high operating voltage range of the output stage provides the drive voltages required by gate controlled devices. The voltage and high peak output current supplied by this optocoupler make it ideally suited for direct driving IGBT with ratings up to 1200V/150A. For IGBTs with higher ratings, the ACPL-H342/ACPL-K342 can be used to drive a discrete power stage which drives the IGBT gate. The ACPL-H342 and ACPL-K342 have the highest insulation voltage of $V_{ORM} = 891V_{peak}$ and $1140V_{peak}$ respectively in the IEC/ EN/DIN EN 60747-5-5.

Key Features

2.5 A Maximum Peak Output Current

2.0A Minimum Peak Output Current

Built-in Active Miller Clamp

Rail-to-Rail Output Voltage

Fast Propagation Delay to minimize Dead Time

tPHL < tPLH to provide “Anti-Cross” Conduction

LED input threshold current hysteresis

ICC = 2.5 mA Maximum Supply Current to allow bootstrap power supply

Under Voltage Lock-Out Protection (UVLO) with Hysteresis

25 kV/μs Minimum Common Mode Rejection (CMR) at VCM = 1500 V

Wide Operating VCC Range: 15 to 30 Volts

Industrial Temperature Range: -40°C to 105°C

Safety Approval:

UL Recognized 3750/5000 VRMS for 1min.

CSA

IEC/EN/DIN EN 60747-5-5 VIORM = 891/1140 Vpeak

Options available are:060 = IEC/EN/DIN EN 60747-5-2, VIORM = 630 VPEAK500 = Tape and Reel Packaging OptionXXXE = Lead Free Option

Application

IGBT/MOSFET gate drive

AC/Brushless DC motor drives

Industrial inverters

Switching Power Supplies (SPS)

Recommended For You

ACPL-H342-000E

Broadcom Corporation

SOP-8

ACPL-P314-000E

Broadcom Corporation

SOP6

ACPL-P343-000E

Broadcom Corporation

SOP6

ACNW3190-300E

Broadcom Corporation

DIPSOP8

ACNV3130-500E

Broadcom Corporation

SOP-10

ACPL-W302-000E

Broadcom Corporation

SOP6

ACPL-W314-000E

Broadcom Corporation

SOP6

ACPL-P340-000E

Broadcom Corporation

SOP6

ACPL-H312-000E

Broadcom Corporation

DIPSOP

ACPL-W340-000E

Broadcom Corporation

SOP6

ACPL-T350-300E

Broadcom Corporation

SOP8

HCNW3120-500E

Broadcom Corporation

SOP8