

Data Sheet

10W Off-Line LED Driver for Dimmable Solid State Lighting, 1.5 Stage

Manufacturers Renesas Technology Corp

Package/Case SO-8

Product Type Power Management ICs

**RoHS** 

Lifecycle



Images are for reference only

Please submit RFQ for iW3602-01 or Email to us: sales@ovaga.com We will contact you in 12 hours.



# **General Description**

## High performance controller optimized for dimmable LED luminaires

Designed to operate from a broad input voltage range of 100VAC to 230VAC, the iW3602 provides an efficient solution for 3W-10W LED luminaires. Incorporating Dialog's proprietary Flickerless<sup>TM</sup> technology, the iW3602 removes LED flicker and permits usage with the industry's broadest range of dimmers. Additionally, the iW3602 incorporates Dialog's proprietary PrimAccurate<sup>TM</sup> primary-side control technology, minimizing the external component count by removing the need for both the traditional opto-coupler and external components, reducing solution size and cost.

The iW3602 integrates an over-temperature protection circuit that works with an external NTC resistor to reduce the drive to the output LEDs when an over-temperature condition is detected, enabling continuous light output while protecting the entire LED driver circuit. For more detailed information on this important protection feature, click here.

Application: AC/DC Digital Power Controller for Dimmable LED Drivers up to 10W

## **Features**

PrimAccurate<sup>TM</sup> - Isolated Off-Line AC/DC Controller

Integrates Flickerless<sup>TM</sup> Technology - Removes LED Flicker

Ideal for 3W to 10W Off-Line LED Applications

45Hz to 66Hz Line Frequency Range - 50Hz/60Hz Compatible

Broad Range of Dimmer Capability - Leading Edge, Trailing Edge and Non-Traditional R, R-C and R-L Types - Automatic Detection of Dimmer Type 1% to 100% Wide Dimming Range

Automatically Detects and Operates without Dimmer

Quasi-resonant Mode for Optimal Efficiency - 85% (Without Dimmer)

Low 10µA Start-Up Current

Fully Protected for Temperature, Sense Resistor Short Circuits, LED Open and Short Circuits and Overvoltage Conditions

LED Temperature Protection - External NTC Input to Reduce Drive to LEDs in Over-temperature Condition

## **Application**

3W-10W Solid State Lighting Applications

Dimmable LED Luminaires



## **Related Products**



<u>iW1677-00</u>

Renesas Technology Corp SOT-23-6



## <u>iW1816-20-SO7</u>

Renesas Technology Corp



## <u>iW1760-01</u>

Renesas Technology Corp SOP8



#### iW3620-00

Renesas Technology Corp SOP-8



#### **iW1760B-00**

Renesas Technology Corp SOP-8



## iW1691-03

Renesas Technology Corp SOP-8 <u>iW3623-00</u>



Renesas Technology Corp SOP-14



<u>iW657P</u>

Renesas Technology Corp