CAT4139AEVB

CAT4139 LED Driver Evaluation Board User's Manual



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EVAL BOARD USER'S MANUAL

Introduction

This document describes the CAT4139AEVB evaluation board for the CAT4139 high efficiency step-up LED driver. The CAT4139 delivers an accurate constant current ideal for driving LEDs.

Schematic

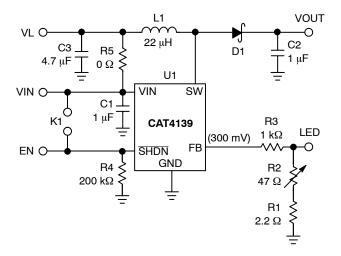


Figure 1. CAT4139AEVB Schematic

Table 1. BILL OF MATERIALS



Figure 2. CAT4139AEVB Board

| Name | Manufacturer | Description | Part Number | Units |
|------|-------------------------------------|--|------------------|-------|
| U1 | ON Semiconductor, Catalyst Group | High Efficiency Boost LED Driver, SOT23-5 | CAT4139 | 1 |
| C1 | Taiyo Yuden | Ceramic Capacitor 1.0 µF/6.3 V X5R, Size 0805 | JMK212BJ105KK-T | 1 |
| C2 | Taiyo Yuden | Ceramic Capacitor 1.0 μF/50 V X7R, Size 1210 | UMK325BJ105KH-T | 1 |
| C3 | Taiyo Yuden | Ceramic Capacitor 4.7 $\mu\text{F/6.3}$ V X5R, Size 0805 | JMK212BJ475KD-T | 1 |
| D1 | TSC | Schottky Diode 40 V/1 A, Sub SMA | SS14L | 1 |
| L1 | NIC | Inductor 22 μH/0.7 A | NPIS43D220MTRF | 1 |
| R1 | Panasonic | SMT Resistor 2.2 Ω/250 mW, Size 1206 | ERJ-8GEYJ2R2V | 1 |
| R2 | Vishay | Trim Pot 200 Ω/500 mW, Multi-Turn | T93YA470KT20 | 1 |
| R3 | Yageo | SMT Resistor 1 k Ω /100 mW, Size 0603 | RC0603FR-071KL | 1 |
| R4 | Yageo | SMT Resistor 200 k Ω /100 mW, Size 0603 | RC0603FR-07200KL | 1 |
| R5 | Yageo | SMT Resistor 0 Ω /125 mW, Size 0805 | RC0805JR-070RL | 1 |
| K1 | Тусо | 2 Pin Header Connector 0.1" Pitch | 640452-2 | 1 |

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