

MIC4833YML-TR

EL Lamp Driver 5.8V 12-Pin DFN EP T/R

Manufacturer: <u>Microchip Technology, Inc</u>

Package/Case: QFN

Product Type: Optoelectronics

RoHS: RoHS Compliant/Lead free RoHS

Lifecycle: Active



Images are for reference only



General Description

The MIC4833 is a low noise dual electroluminescent (EL) panel driver used in backlighting applications. The MIC4833 converts a low DC voltage to a high DC voltage using a boost converter and then alternates the high DC voltage across the EL panels using an H-bridge. The MIC4833 incorporates internal waveshaping circuitry specifically designed to reduce audible noise emitted by EL panels. The two EL panels may be dimmed by applying a PWM signal to the device. The MIC4833 drives two outputs from a single inductor and requires a minimum number of passive components. It features an operating input voltage range of 2.3V to 5.8V, making it suitable for 1-cell Li-Ion and 2- or 3-cell alkaline/NiCad/NiMH battery applications.

An external resistor may be used to adjust the output voltage slew rate to reduce audible noise. The MIC4833 features separate oscillators for the boost and H-bridge stages to allow independent control. External resistors set the operating frequencies of each stage allowing the EL circuit to optimize efficiency and brightness.

Key Features

Drives two EL panels, up to 4in² each at full brightness

Independent input control for each of the two panels and allows PWM dimming.

220VPP regulated AC output waveform

2.3V to 5.8V DC input voltage

Wave-shaping circuit to reduce audible noise

Adjustable slew rate for audible noise reduction

Independently adjustable boost converter and EL panel frequency

Single inductor to power both panels

0.1μA typical shutdown current



Recommended For You

MIC3203YM

Microchip Technology, Inc

SOP8

MIC2842AYMT-TR

Microchip Technology, Inc

10-TMLF2x2

MIC4834YMM-TR

Microchip Technology, Inc

10-TFSOP

MIC4834YML-TR

Microchip Technology, Inc

VDFN3x3

MIC4826YMM

Microchip Technology, Inc

MSOP-8

MIC4802YME

Microchip Technology, Inc

SOP8

MIC3202-1YME

Microchip Technology, Inc

SOIC

MIC3232YMM

Microchip Technology, Inc

MSOP-10

MIC3203-1YM

Microchip Technology, Inc

SOP-8

MIC4830YML

Microchip Technology, Inc

QFN

MIC4801YM

Microchip Technology, Inc

SOP8

SY88932LMI

Microchip Technology, Inc

QFN-16

MIC2292-15YML-TR

Microchip Technology, Inc

VDFN-8

MIC3223YTSE

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TSSOP-16

SY88912LMI

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MLF-16