



MB39C601 for LED lighting

TRIAC Dimmable LED Driver IC

Description

MB39C601 is a switching regulator controller with the Flyback topology. The LED current is regulated by controlling the switching on-time or controlling the switching frequency, depending on the LED load.

Features

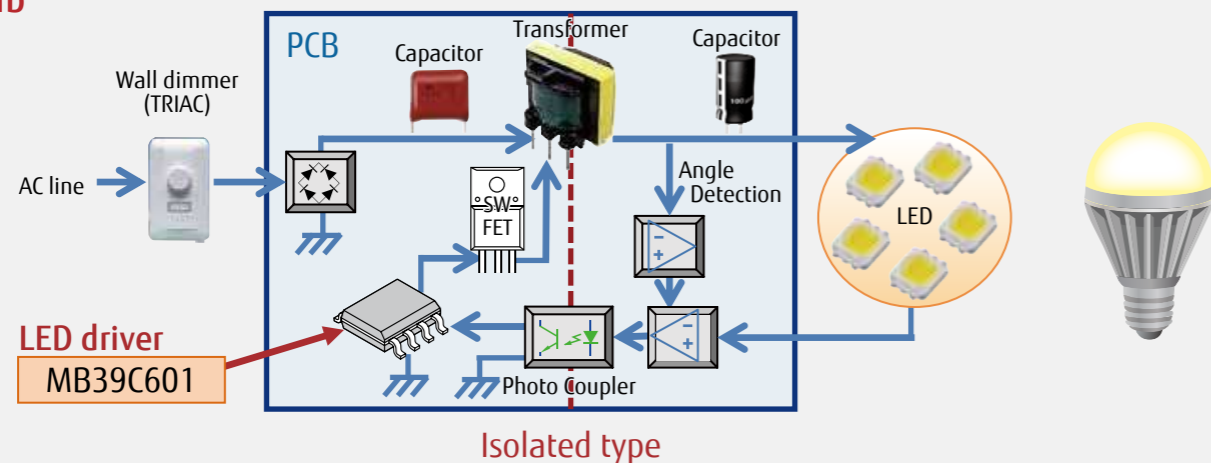
- TRIAC dimmable LED lighting
- High power factor (>0.9) in Single Conversion
- High efficiency (>85%) and low EMI
- Universal Input voltage: 85VAC to 265VAC
- Small PKG SOP-8

Applications

- LED lighting with TRIAC dimmer
- Down light, Bulb, Tube, etc.

Application Block diagram

LED Bulb



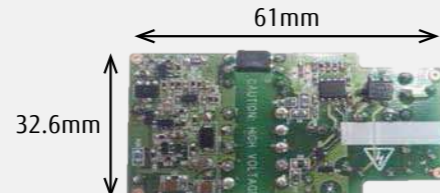
TRIAC Dimming Solution

LED drive small board for LED Bulb

Top View

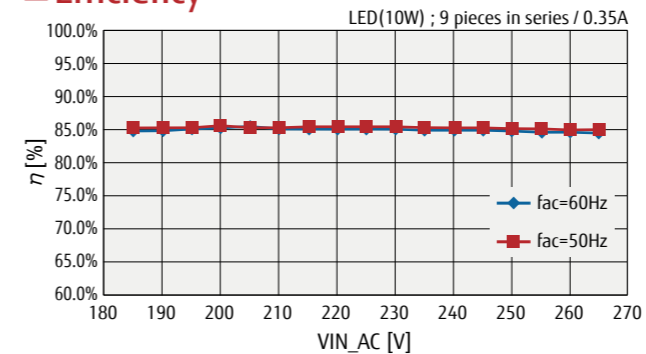


Bottom View

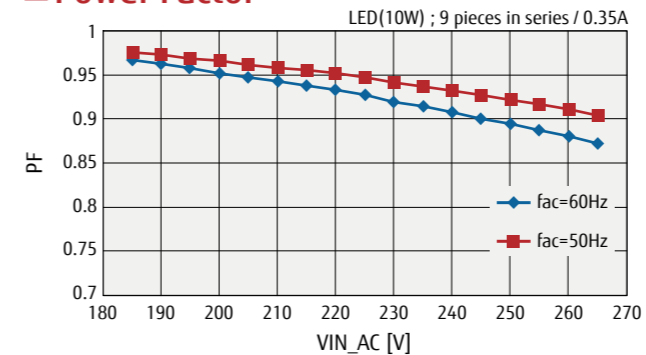


Specification & Characteristic

Efficiency

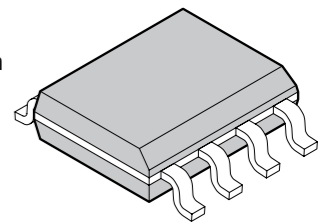


Power Factor



Item	MB39C601 Specification
SW Method	Constant on time operation, PFC single conversion of discontinuous mode and detecting in transformer zero current. Controlling the switching frequency
SW FET	External
Junction Temp.	Tjmax=125 deg.
Operation Temp.	Ta=-40 deg. to +85 deg.
SW frequency	30kHz to 130kHz (max)
Protection	Under voltage lockout, Over load, Over voltage, Over temperature
Package	SOP-8

SOP-8
3.9mm × 5.05mm × 1.75mm
(Pin pitch 1.27mm)



TRIAC Dimmer Performance Example List

No.	Manufacture	Minimum Conduction Angle, deg.	Minimum lout, mA	Maximum Conduction Angle, deg.	Maximum lout, mA
1	T&J	69	58	162	383
2	OPPLE	76	79	172	383
3	Panasonic	74	73	153	383
4	SIMON	69	63	140	383
5	LONON	64	41	162	383
6	ABB	82	98	170	383
7	MANK	92	135	174	383
8	nano	69	48	166	383
9	HIPPO Light	64	36	162	383
10	ANAM legrand	82	89	162	383

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