

TRIAC Dimmable LED Driver IC for LED lighting MB39C601

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. MB39C601 is suitable for TRIAC dimmable lighting applications.

FEATURES

- TRIAC dimmig
- High power factor(>0.9) in Single Conversion
- High efficiency(>85%) and low EMI
- Universal Input voltage: 85VAC to 265VAC
- Both Isolation type and Non-isolation type can be configured
- Both leading edge TRIAC dimmer and trailing edge TRIAC dimmer are available
- Protection function : UVLO, Over load, OVP, OTP
- Small PKG SOP-8

APPLICATIONS

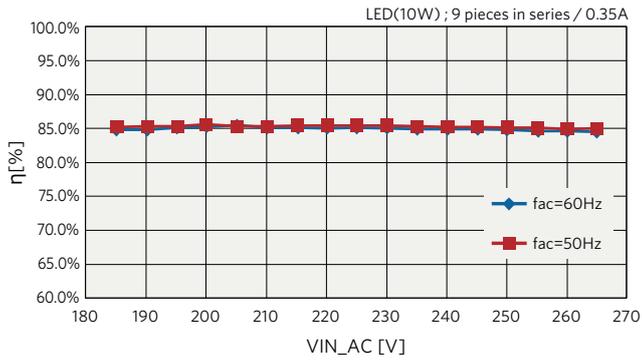
- LED lighting with TRIAC dimmer
- LED bulbs
- LED down lights
- LED ceiling lights etc.

TRIAC DIMMABLE SOLUTION BOARD EXAMPLE

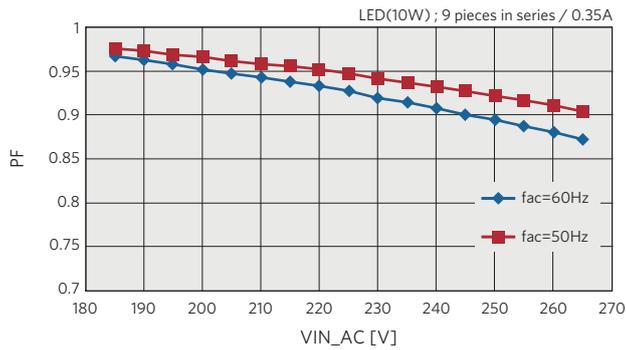
No.	Solution Type	Picture	Isolation Type	Output Power	AC Input	DC Output	PF Efficiency	Board Size (mm)
1	Bulb PAR20/30/38		Isolation	10W	200Vac	26V 390mA	PF > 0.92 η > 85%	33×61 (H)28
2	GU10/Bulb Candle Lamp		Isolation	3W	220Vac	18V 170mA	PF > 0.91 η > 75%	26×18.5 (H)15
3	GU10/Bulb Candle Lamp		Isolation	3W	110Vac	18V 170mA	PF > 0.97 η > 75%	26×18.5 (H)15
4	Bulb E17 Lamp		Non-Isolation	8.5W	110Vac	61V 130mA	PF > 0.85 η > 88%	20.2×44.5 (H)12.5
5	Bulb E17 Lamp		Non-Isolation	5W	100Vac	72V 82mA	PF > 0.86 η > 88%	23×34 (H)10.5

SPECIFICATION & CHARACTERISTIC

EFFICIENCY

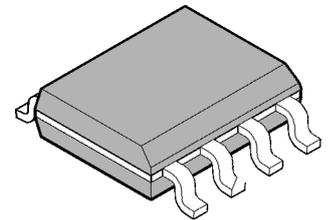


POWER FACTOR



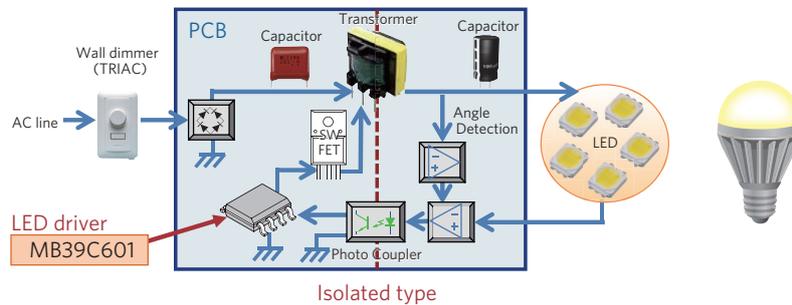
Item	MB39C601 Specification
SW Method	Switching on-time control, PFC single conversion of discontinuous mode and detecting in transformer zero current. Switching frequency control
SW FET	External
Junction Temp.	Tjmax = 125 deg.
Operation Temp.	Ta = -40 deg. to +85 deg.
SW frequency	30kHz to 130kHz (max)
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)



APPLICATION BLOCK DIAGRAM (EXAMPLE)

LED Bulb



WEB DESIGN SIMULATION SERVICE



URL: <http://www.spansion.com/easydesignsim/>

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