

The quasi resonant control IC for AC-DC converter Monolithic IC MM3661 Series

Outline

This IC is a quasi resonant control IC for AC-DC converter. This control helps to keep the EMI low by soft switching. This IC has a built-in start-up circuit that 500V tolerates voltage.

It helps to which improve start-up speed with the start-up circuit loss reduction. This IC contributes to the high efficiency at light-load by frequency decrease function with Burst operation. In addition, This IC is equipped with AC detection function and load detection function or a dedicated output terminal.

Thereby it is possible to realize a the start-stop control and output voltage control of the PFC circuit.

Features

| | |
|--|--|
| 1. Absolute maximum rating (HV pin) | 500V |
| 2. Recommended operating condition (VDD pin) | 10V to 24V |
| 3. PFC drive voltage (PSTB pin) | VDD |
| 4. Operating current | 0.72mA (TYP) |
| 5. Frequency | 27.7kHz to 75kHz (TYP) |
| 6. The range of temperature | -30°C to 125°C |
| 7. Light load burst operation | |
| 8. Frequency decrease function | |
| 9. PFC circuit control function | AC detection, Load detection |
| 10. Protective function | VDD overvoltage protection, external latch protection, soft-start function, overload protection, overcurrent protection, CS pin OPEN protection |

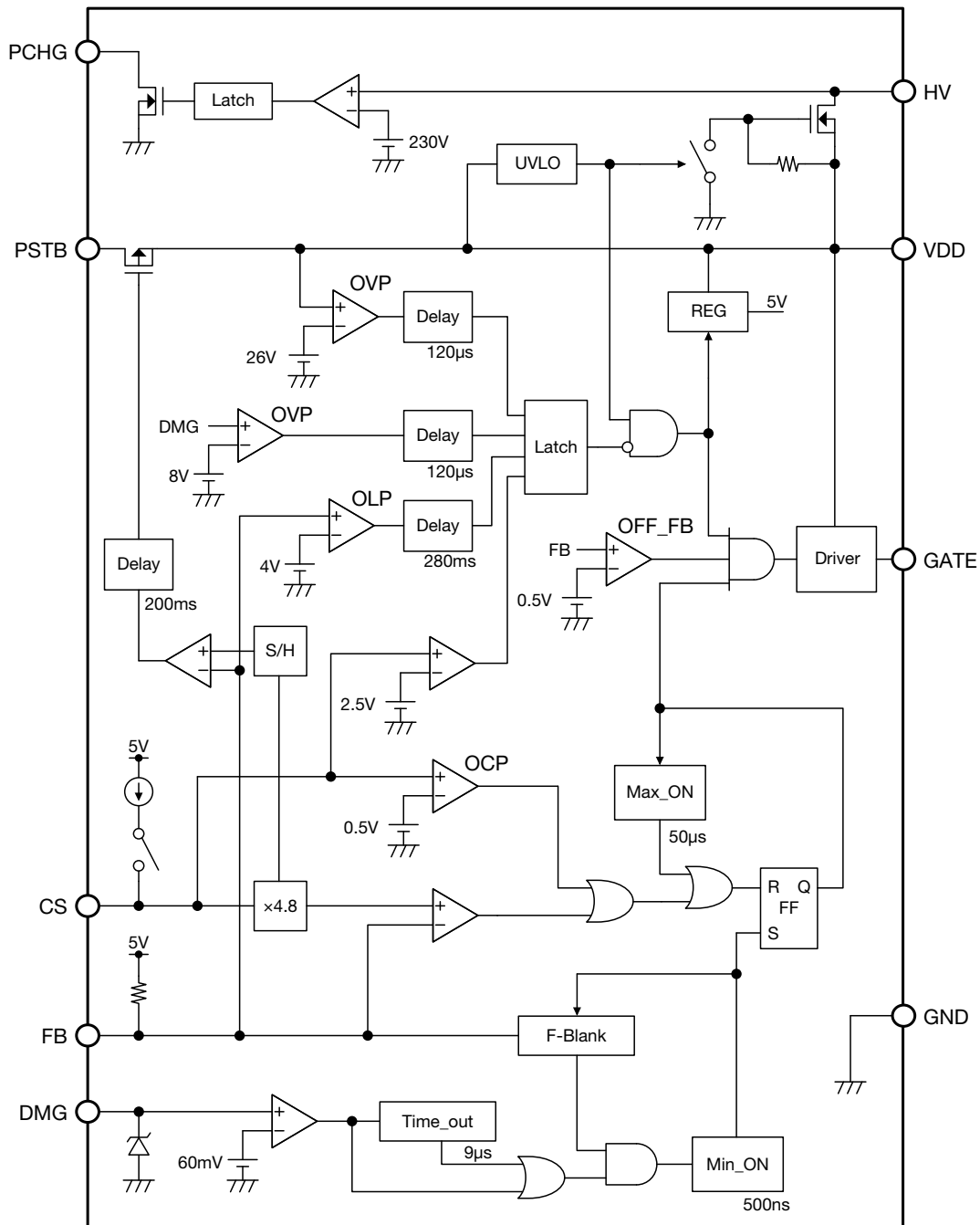
Package

SOP-10A

Applications

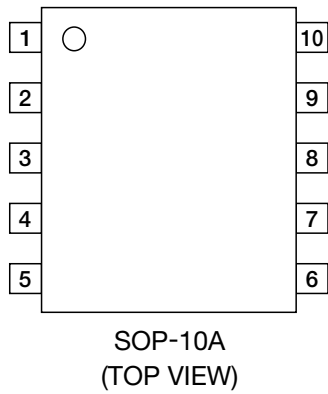
1. AC adapters
2. Game console
3. TV
4. Printer
5. Various consumer electronics

Block Diagram



- Any products mentioned in this catalog are subject to any modification in their appearance and others for improvements without prior notification.
- The details listed here are not a guarantee of the individual products at the time of ordering. When using the products, you will be asked to check their specifications.

Pin Assignment

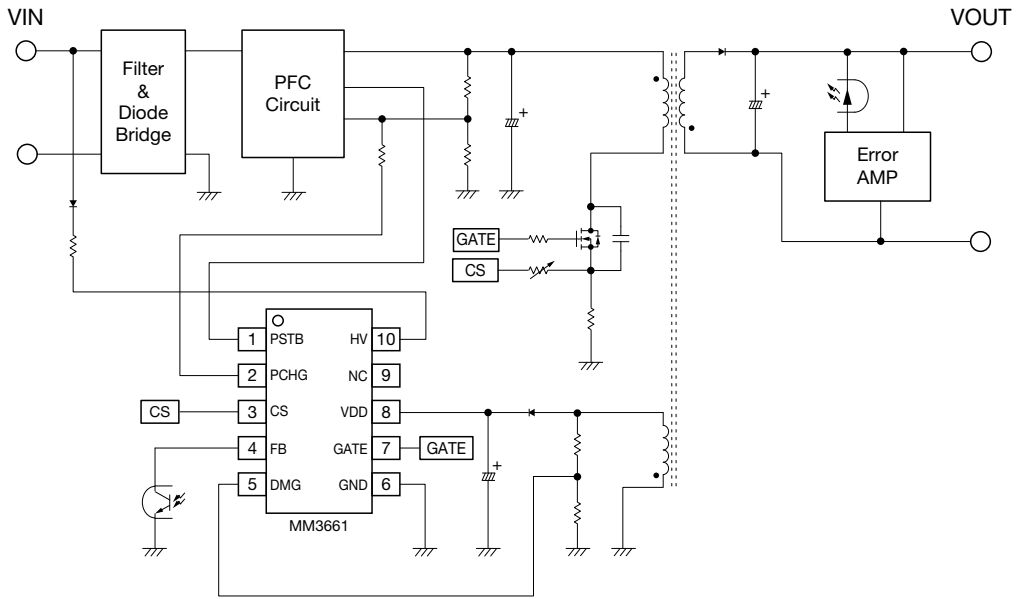


| | |
|----|------|
| 1 | PSTB |
| 2 | PCHG |
| 3 | CS |
| 4 | FB |
| 5 | DMG |
| 6 | GND |
| 7 | GATE |
| 8 | VDD |
| 9 | NC |
| 10 | HV |

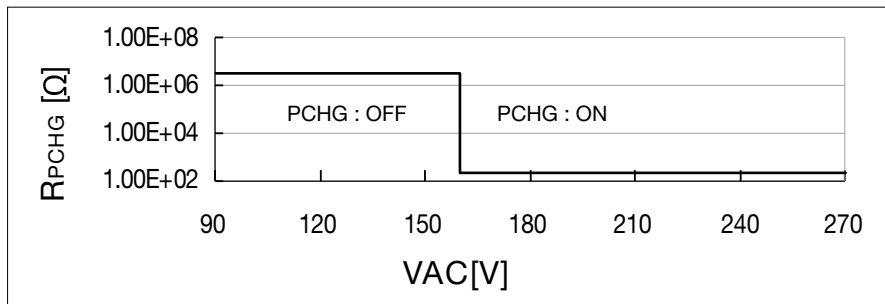
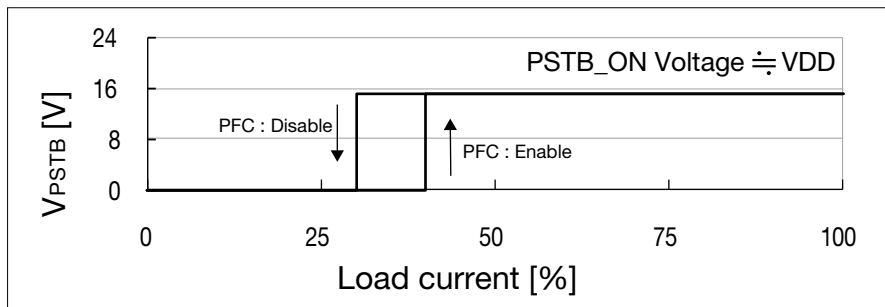
Pin Description

| Pin No. | Pin name | Functions |
|---------|----------|-----------------------------------|
| 1 | PSTB | PFC Circuit Drive |
| 2 | PCHG | PFC Circuit Output-Voltage Change |
| 3 | CS | Current Detection |
| 4 | FB | Feedback Detection |
| 5 | DMG | Zero Cross Detection |
| 6 | GND | GND |
| 7 | GATE | External MOS drive |
| 8 | VDD | Power supply |
| 9 | NC | No Connection |
| 10 | HV | High Voltage Startup |

Application Circuit



Characteristics



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