

4 W, 12 V output, isolated flyback converter using VIPer™ Plus - VIPER06HS

Data brief



Description

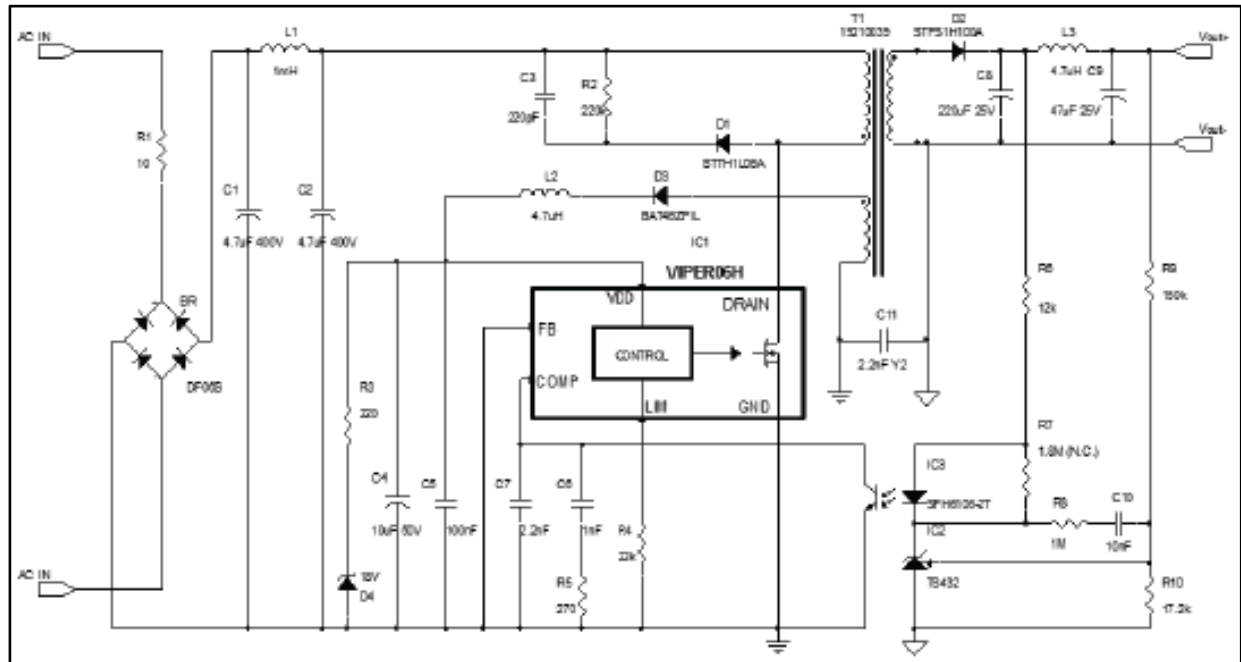
The STEVAL-ISA135V1 is a 12 V - 4 W power supply in isolated flyback topology based on the VIPer06HS, a new offline high voltage converter having, as main features: 800 V avalanche rugged power section, PWM operation at 115 kHz with frequency jittering for lower EMI, cycle-by-cycle current limit with adjustable set point, on-board soft-start and safe auto-restart after a fault condition.

Features

- AC main input voltage: V_{IN} 85 V_{AC} - 265 V_{AC}
- Main frequency: f_L 50 Hz - 60 Hz
- Output voltage: V_{OUT} 12 V
- Max output current: I_{OUT} 333 mA
- Precision of output regulation:
 $\Delta V_{OUT_LF} \pm 5 \%$
- High frequency output voltage ripple:
 ΔV_{OUT_HF} 50 mV
- Min active mode efficiency: η_{AV} 71 %
- Max ambient operating temperature:
 T_{AMB} 60 °C
- Thermal shutdown with hysteresis
- Delayed overload protection
- Open loop failure protection (if auxiliary winding is used)
- RoHS compliant

1 Schematic diagram

Figure 1: STEVAL-ISA135V1 circuit schematic



2 Revision history

Table 1: Document revision history

Date	Version	Change
02-Oct-2013	1	Initial release.
08-May-2014	2	Title has been updated.

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