



EVAL6562-80W

L6562-80W high performance transition mode PFC evaluation board

Data Brief

General description

The L6562 is a current-mode PFC controller operating in Transition Mode (TM). Pin-to-pin compatible with the predecessor L6561, it offers improved performance. The L6562 - 80W Evaluation Board is specific for 80W PFC pre-regulator and designed to operate in wide-range mains.



Figure 1. EVAL6562 - 80W schematic

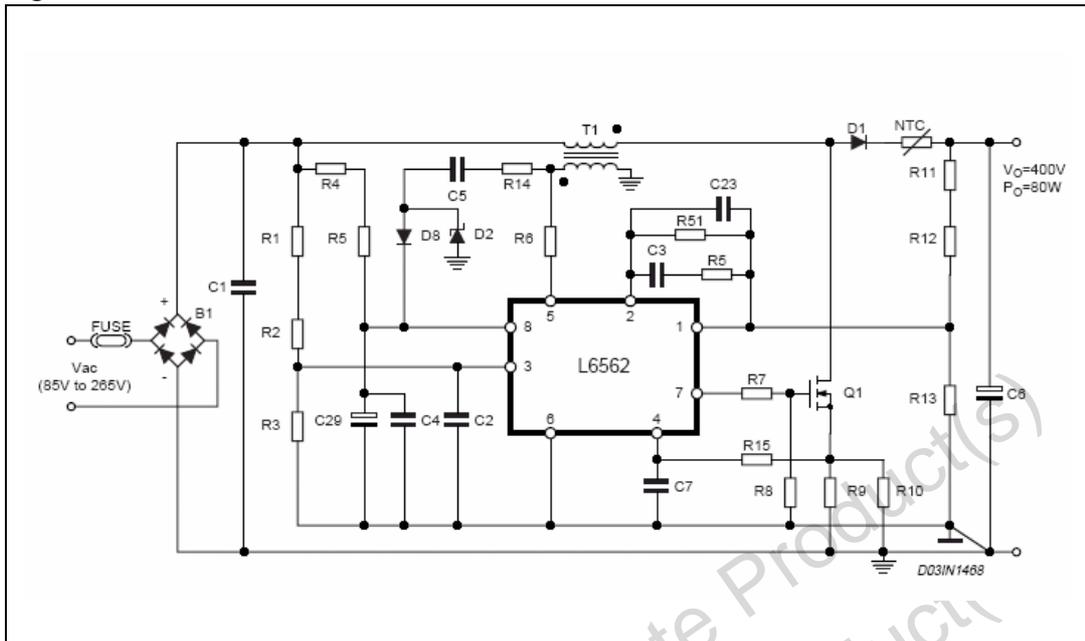


Figure 2. EVAL6562 - 80W : PCB and component layout (top view, real size: 57 x 108mm)

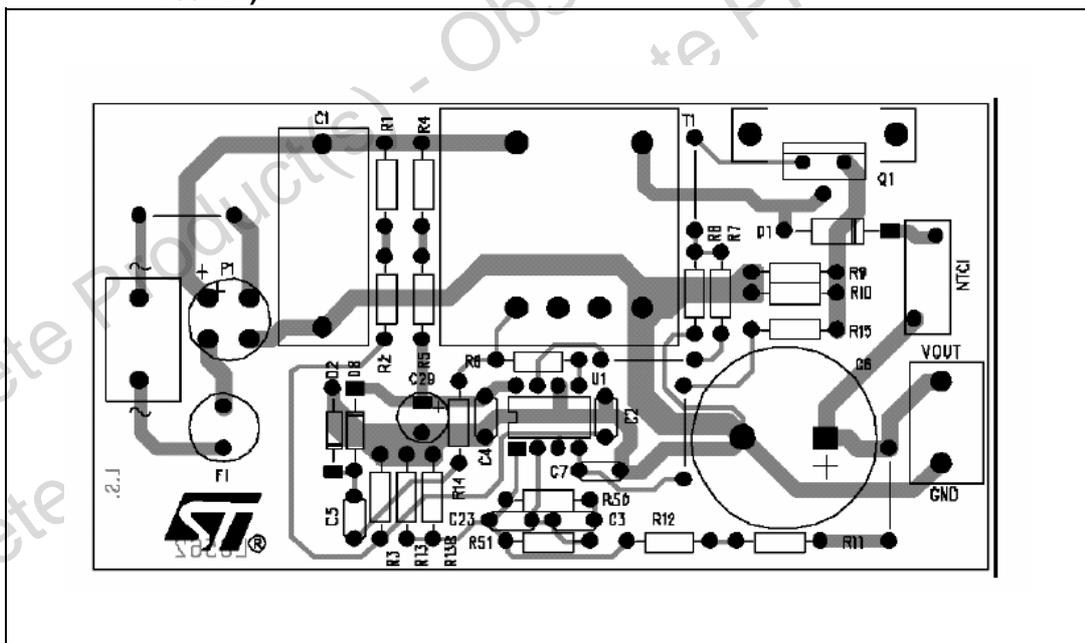
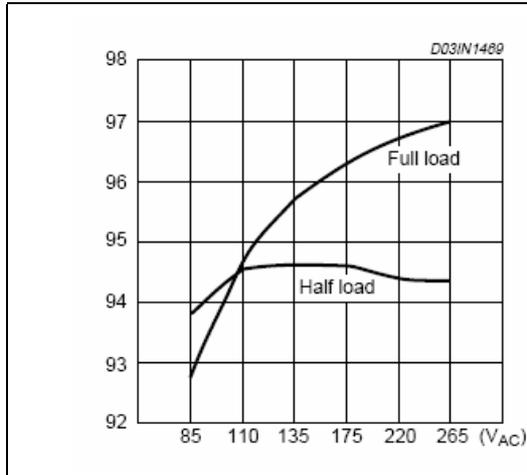
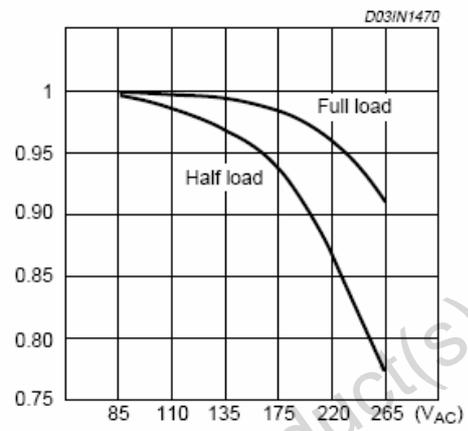


Table 1. Part list

| Parameters | Values |
|------------|----------------------|
| R1 | 750K Ω 1% |
| R2 | 750K Ω 1% |
| R3 | 10K Ω 1% |
| R4, R5 | 180K Ω 5% |
| R6 | 68K Ω 5% |
| R7 | 33 Ω |
| R8 | 47K Ω |
| R9, R10 | 0.82 Ω , 0.6W |
| R11, R12 | 750K Ω 1% |
| R13 | 9.53K Ω 1% |
| R14 | 100 Ω , 5% |
| R15 | shorted |
| R50 | 12K Ω |
| R51 | N.A |
| NTC | 2.5 |
| C1 | 0.47 μ F 400V |
| C2 | 10nF |
| C3 | 0.68 μ F |
| C4 | 100nF |
| C5 | 12nF |
| C6 | 47 μ F, 450V |
| C7 | N.A |
| C23 | 33nF |
| C29 | 22 μ F, 25V |
| D1 | STTH1L06 |
| D2 | 1N5248B |
| D8 | 1N4148 |
| Q1 (TO220) | STP8NM50 |
| BRIDGE | DF06M |
| FUSE | 4A/250V |

- T1: Boost inductor spec (ITACOIL E2543/E)
 - E25x13x7 core, 3C85 ferrite
 - 1.5mm gap for 0.7mH primary inductance
 - Primary: 105 turns (20x0.1mm)
 - Secondary: 11 turns (0.1mm)

Figure 3. EVAL6562 - 80W: efficiency (left)

Figure 4. EVAL6562 - 80W: PF (right) vs. V_{in} 

1 Revision history

Table 2. Revision history

| Date | Revision | Changes |
|-------------|----------|-------------|
| 03-Nov-2006 | 1 | First issue |

Obsolete Product(s) - Obsolete Product(s)
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