Experimental Results

Specifications

- Input Power ≈ 21W
- Output Power ≈ 19W
- Line Voltage = 198VAC~264VAC
- Line Frequency = 50Hz
- LED Forward Voltage = 110V to 130V
- LED Current ≈ 160mA
- Efficiency ≈ 92%
- Power Factor ≥ 0.9
- Topology: Single-stage buck-boost
- Solution size: 203.5mm(L) x 18mm(W) x 11mm(H)

Test Conditions

- Line Voltage = 220VAC/50Hz unless otherwise specified
- LED Forward Voltage ≈ 120V
- LED Current ≈ 160mA
- Ambient Temperature ≈ 25⁰C
Electrical Performance

**FIGURE 1.** Efficiency vs. Line Voltage from 198VAC to 264VAC/50Hz

**FIGURE 2.** LED Current vs. Line Voltage from 198VAC to 264VAC/50Hz
FIGURE 3. Power Factor vs. Line Voltage from 198VAC to 264VAC/50Hz

FIGURE 4. Current Harmonic Performance vs. EN/IEC61000-3-2 Class C Limits at 220VAC/50Hz
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