Features
- Constant Voltage + Constant Current mode output
- Plastic housing with Class II design
- Built-in active PFC function
- Class 2 power unit
- Fully encapsulated with IP67 level
- Typical lifetime>50000 hours
- 5 years warranty

Applications
- LED panel lighting
- LED downlight
- LED decorative lighting
- LED tunnel lighting
- Moving sign

Description
LPF-25 series is a 25W AC/DC LED driver featuring the dual modes constant voltage and constant current output. LPF-25 operates from 90~305VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the efficiency up to 87%, with the fanless design, the entire series is able to operate for -35°C ~ +70°C case temperature under free air convection. The entire series is rated with IP67 ingress protection level and is suitable to work for a variety of applications at dry, damp or wet locations.

Model Encoding
LPF - 25 - 24

- Rated output voltage(12V/15V/20V/24V/30V/36V/42V/48V/54V)
- Rated wattage
- Series name
## SPECIFICATION

### OUTPUT

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DC VOLTAGE</th>
<th>CONSTANT CURRENT REGION</th>
<th>RATED CURRENT</th>
<th>RATED POWER</th>
<th>RIPPLE &amp; NOISE (max.)</th>
<th>VOLTAGE TOLERANCE</th>
<th>LINE REGULATION</th>
<th>LOAD REGULATION</th>
<th>SETUP, RISE TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPF-25-12</td>
<td>12V</td>
<td>6.6 ~ 12V</td>
<td>2.1A</td>
<td>25.2W</td>
<td>±4.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±2.0%</td>
<td>1500ms</td>
</tr>
<tr>
<td>LPF-25-15</td>
<td>15V</td>
<td>8.25 ~ 15V</td>
<td>1.67A</td>
<td>25.05W</td>
<td>±4.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±2.0%</td>
<td>16ms/115VAC</td>
</tr>
<tr>
<td>LPF-25-20</td>
<td>20V</td>
<td>11 ~ 20V</td>
<td>1.25A</td>
<td>25W</td>
<td>±4.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±2.0%</td>
<td>0.03VAC</td>
</tr>
<tr>
<td>LPF-25-24</td>
<td>24V</td>
<td>13.2 ~ 24V</td>
<td>1.05A</td>
<td>25W</td>
<td>±4.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±2.0%</td>
<td>16ms/230VAC</td>
</tr>
<tr>
<td>LPF-25-30</td>
<td>30V</td>
<td>16.3 ~ 30V</td>
<td>0.84A</td>
<td>25W</td>
<td>±4.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±2.0%</td>
<td>16ms/230VAC</td>
</tr>
<tr>
<td>LPF-25-36</td>
<td>36V</td>
<td>19.8 ~ 36V</td>
<td>0.7A</td>
<td>25W</td>
<td>±4.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±2.0%</td>
<td>16ms/230VAC</td>
</tr>
<tr>
<td>LPF-25-42</td>
<td>42V</td>
<td>23.1 ~ 42V</td>
<td>0.6A</td>
<td>25W</td>
<td>±4.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±2.0%</td>
<td>16ms/230VAC</td>
</tr>
<tr>
<td>LPF-25-48</td>
<td>48V</td>
<td>26.4 ~ 48V</td>
<td>0.53A</td>
<td>25.2W</td>
<td>±4.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±2.0%</td>
<td>16ms/230VAC</td>
</tr>
<tr>
<td>LPF-25-54</td>
<td>54V</td>
<td>29.7 ~ 54V</td>
<td>0.47A</td>
<td>25.44W</td>
<td>±4.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±2.0%</td>
<td>16ms/230VAC</td>
</tr>
</tbody>
</table>

**Note:** Please refer to "STATIC CHARACTERISTIC" section

### INPUT

<table>
<thead>
<tr>
<th>VOLTAGE RANGE</th>
<th>POWER FACTOR</th>
<th>TOTAL HARMONIC DISTORTION</th>
<th>EFFICIENCY (Typ.)</th>
<th>AC CURRENT</th>
<th>INRUSH CURRENT (Typ.)</th>
<th>MAX. No. of PSUs on 16A CIRCUIT BREAKER</th>
<th>LEAKAGE CURRENT</th>
<th>OVER CURRENT</th>
<th>SHORT CIRCUIT</th>
<th>OVER VOLTAGE</th>
<th>OVER TEMPERATURE</th>
<th>WORKING HUMIDITY</th>
<th>STORAGE TEMP. HUMIDITY</th>
<th>TEMP. COEFFICIENT</th>
<th>VIBRATION</th>
<th>SAFETY &amp; EMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 ~ 305VAC</td>
<td>PF ≥ 0.97/115VAC</td>
<td>THD&lt; 20%@load≤60%/115VAC, @load≤75%/277VAC</td>
<td>84%</td>
<td>0.4A/115VAC</td>
<td>COLD START 50A(twidth=200s measured at 50% Ipeak) at 230VAC, Per NEMA 410</td>
<td>12 units (circuit breaker of type B) / 21 units (circuit breaker of type C) at 230VAC</td>
<td>&lt;0.75mA</td>
<td>1800W</td>
<td>0%</td>
<td>15 ~ 18V</td>
<td>47.5 ~ 71.5V</td>
<td>95% RH</td>
<td>-40 ~ +80°C, 10 ~ 95% RH</td>
<td>±0.03%/°C (0 ~ 50°C)</td>
<td>10 ~ 500Hz</td>
<td>UL8750, CSA C22.2 No. 250.0-08; ENEC EN61347-1, EN61347-2-13 independent, EN62384, J61347-1, J61347-2-13, EAC TP TC04, GB19510.14, IP67 approved; Design refer to UL60950-1, TUV EN60950-1</td>
</tr>
</tbody>
</table>

### ENVIRONMENT

<table>
<thead>
<tr>
<th>WORKING TEMP.</th>
<th>15 ~ 18V</th>
<th>17.5 ~ 21V</th>
<th>23 ~ 27V</th>
<th>25 ~ 35V</th>
<th>34 ~ 40V</th>
<th>41 ~ 49V</th>
<th>46 ~ 54V</th>
<th>54 ~ 63V</th>
<th>59 ~ 68V</th>
</tr>
</thead>
</table>

### OTHERS

- **MTBF:** 473.4Khrs min. (MIL-HDBK-217F (25°C))
- **DIMENSION:** 148*40*32mm (L*W*H)
- **PACKING:** 0.38Kg, 40pcs/ 15.4Kg/1.02CUFT

### NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.
2. Please refer to "DRIVING METHODS OF LED MODULE".
3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
4. Tolerance : includes set up tolerance, line regulation and load regulation.
5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" section for details.
6. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time.
7. The driver is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
8. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently connected to the mains.
9. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly at point (or Tmp, per DLC), is about 70°C or less.
10. Please refer to the warranty statement on MEAN WELL'S website at http://www.meanwell.com
11. The ambient temperature derating of 3.5°C/100m with fanless models and of 5°C/100m with models for operating altitude higher than 2000m (6500ft).
12. For any application note and IP water proof function installation caution, please refer our user manual before using.

**File Name:** LPF-25-SPEC 2019-01-10
This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs.

In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems. Should there be any compatibility issues, please contact MEAN WELL.
LPF-25 series 25W Constant Voltage + Constant Current LED Driver

- **OUTPUT LOAD vs TEMPERATURE**
- **STATIC CHARACTERISTIC**
- **TOTAL HARMONIC DISTORTION (THD)**
- **EFFICIENCY vs LOAD**

- De-rating is needed under low input voltage.

LPF-25 series possess superior working efficiency that up to 87% can be reached in field applications.

File Name:LPF-25-SPEC 2019-01-10
LIFE TIME

File Name: LPF-25-SPEC 2019-01-10
**MECHANICAL SPECIFICATION**

CASE NO.: LPF-16A  Unit:mm

- **AC/N (Blue)**
- **AC/L (Brown)**
- **+V (Red)**
- **-V (Black)**

- **SJTW 18AWG**
- **SVT 18AWG*2C**

- **ψ 3.6**
- **ψ 3.6**
- **ψ 3.5**
- **ψ 3.5**
- **ψ 3.5**
- **ψ 3.5**
- **ψ 40**
- **ψ 300 ± 20**

**Note:** Max. Case Temperature

**Recommend Mounting Direction**

**INSTALLATION MANUAL**

Please refer to: http://www.meanwell.com/manual.html