

Thomas Research Products

Innovative & Energy Saving Lighting Controls

LED-25W Series

Switch Mode LED Drivers
Constant Current & Constant Voltage with Isolation
Black Magic Thermal Advantage™ Housing

Total Power: 25 Watts
Input Voltage: 100-277 VAC
Outputs: Single from 8 VDC to 36 VDC
Indoor or Outdoor Applications
Active Power Factor Correction
UL1310, Class 2 and UL 48 Compliant
IP66 Compliant

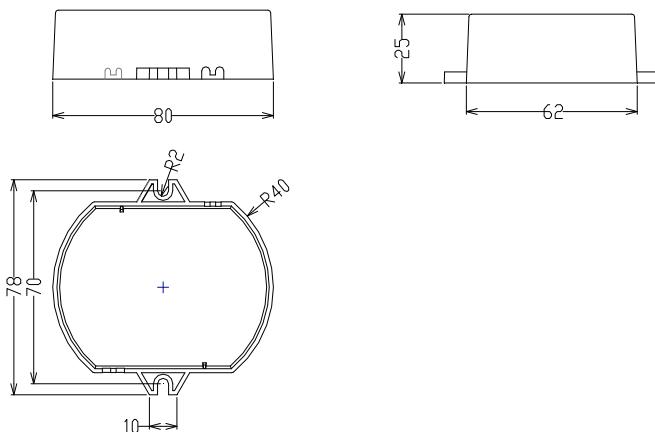
Electrical Specifications

Input Voltage Range: 100 ~ 277 VAC
Frequency: 47 to 63 Hz
Power Factor: >0.90% at full load
Inrush Current: <20.0 Amps maximum @ 230 VAC, cold start 25°C
Input Current: 0.40 Amps maximum at 115 VAC
Efficiency: 85% typical at maximum load
Maximum Power: 25W
Current Accuracy: +/- 1% (when applicable)
Load Regulation: +/- 3%
Leakage Current: 300 uA Typical
Hold Up Time: Half Cycle
Protection: Output Over-Voltage, Output Over-Current, and Output Short Circuit Protection with Auto Recovery

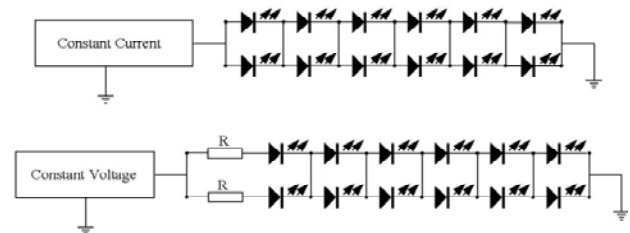
Environmental Specifications

Operating Temperature: -30°C to +60°C
Storage Temperature: -40°C to +85°C
Humidity: 5% to 95%
Cooling: Convection
Vibration Frequency: 5 to 55 Hz/2g, 30 minutes
MTBF: >100,000 Hours at full load and 25°C ambient conditions
EMC: Compliant to CISPR 22 Class B, CISPR 14-1 Class B, GB4343 1-2003, GB17625.1-2003

Dimensions



Wiring and Application Information



This configuration is based on LED with the following parameters
V: 3.0-3.5V I: 500mA - 520mA
Recommended value for R is 12 Ohm, 3W

Constant current mode product specifications

No.	Model Number	Output voltage range	Output constant current	Current accuracy	Output power	Max. efficiency
1	LED25-36-C0700	18-36VDC	700mA	+/-5%	25W	87%
2	LED25-28-C0850	14-28VDC	850mA	+/-5%	25W	87%
3	LED25-24-C1040	12-24VDC	1040mA	+/-5%	25W	86%
4	LED25-20-C1250	12-20VDC	1250mA	+/-5%	25W	86%
5	LED25-16-C1560	8-16VDC	1560mA	+/-5%	25W	85%
6	LED25-12-C2080	8-12VDC	2080mA	+/-5%	25W	85%

Constant voltage mode product specifications

No.	Model Number	Output constant voltage	Output current (max.)	Voltage accuracy	Output power	Max. efficiency
1	LED25-36	36VDC	700mA	+/-5%	25W	87%
2	LED25-28	28VDC	850mA	+/-5%	25W	87%
3	LED25-24	24VDC	1040mA	+/-5%	25W	86%
4	LED25-20	20VDC	1250mA	+/-5%	25W	86%
5	LED25-16	16VDC	1560mA	+/-5%	25W	85%
6	LED25-12	12VDC	2080mA	+/-5%	25W	85%

Safety and Regulatory Certifications

UL UL1310, Class 2 and UL48 Certified
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