

PHILIPS

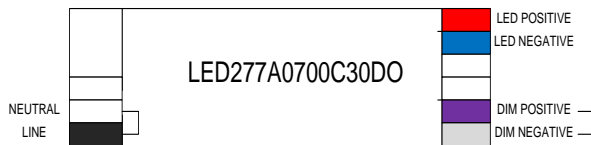
LED277A0700C30DO

Electrical Specifications

| | |
|-----------------|-------------------------------|
| Brand Name | XITANIUM |
| Description | Xtitanium 21W 0.7A 0-10V 277V |
| Input Voltage | 277 |
| Input Frequency | 60Hz |
| RoHS | Yes |
| Status | Active |

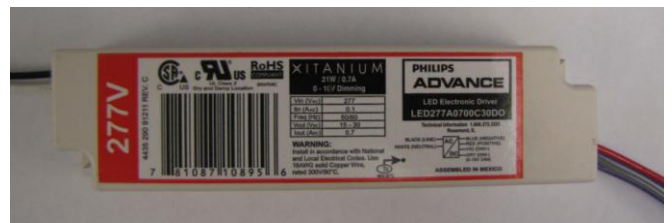
| Output Power (W) | Output Voltage (V) | Output Current (A dc) | Typical Efficiency@ Max Load | Max Case Temp (°C) | Input Current (A rms) | Max. Input Power (W) | Typ Inrush Current (A _{pk} /50%-μs) | THD @ Max Load (%) | Power Factor @ Max Load | Surge Protection Diff (KV)/Ring wave 100KHz(KV) | Typ Weight (Lbs/kgs) | Envir. Protection Rating |
|------------------|--------------------|-----------------------|------------------------------|--------------------|-----------------------|----------------------|--|--------------------|-------------------------|---|----------------------|--------------------------|
| 21 | 15~30 | 0.7 | 277Vac | 80 °C | 277Vac | 26 | 4.5/35us | <20% | >0.9 | 3/6 | .88/ 0.4 | UL Dry & Damp |
| | | | 86% | | 0.1 | | | | | | | |

Wire Diagram



| Dimming Method | Dimming Range | Min Output Current (A dc) | Other Comments |
|--------------------|---------------|---------------------------|--------------------------------|
| 0-10V Non-Isolated | 15% - 100% | 0.105 | Dimming source current: 150 μA |

Enclosure



| | in. (mm) |
|-------------|-------------|
| Case Length | 5.2(132) |
| Case Width | 1.35 (34.2) |
| Case Height | 0.98 (25) |

Revised 02/07/2012

PHILIPS LIGHTING ELECTRONICS N.A.
 10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018
 Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance
 Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886



LED277A0700C30DO

| | |
|-----------------|------------------------------|
| Brand Name | XITANIUM |
| Description | Xitanium 21W 0.7A 0-10V 277V |
| Input Voltage | 277 |
| Input Frequency | 60Hz |
| RoHS | Yes |
| Status | Active |

Electrical Specifications

| Product Data | |
|-----------------------------------|---|
| Full product code | LED277A0700C30DO |
| Full product name | Xitanium 21W 0.7A 0-10V 277V |
| Net weight per piece | 0.4KG / 0.88 lbs |
| Interfaces | 0-10V Dimming(Non-Isolated) |
| Ambient Temp Range | -40 C to +55 C |
| Line Voltage | 277V |
| Line Current | 0.1A rms Max |
| Line Frequency | 47-75Hz |
| Life @ 70C | >50kHrs |
| Max TC | 80C |
| Inrush current pulse peak/width | 4.5Apk/35µs |
| LED Current Tolerance | +/-5% of Max current level @25C |
| Earth leakage current | 0.5 mA rms [max] |
| Mains voltage safety (AC) | +/-10% |
| Mains voltage performance (AC) | +/-10% |
| Minimum mains voltage operational | 249V [min] |
| Maximum mains voltage operational | 305V [max] |
| Output Current ripple | Typ: 30% @ 700mA (ripple = pk-avg/avg) |
| THD total @max load | < 20% (@full load and over entire input voltage range) |
| PF @ Max Load | >0.9 |
| Protections | Short Circuit and Open Circuit Protection for LED + and LED- |
| Terminal Wires | Input: 7.5"(±1.5") 18AWG solid wire, Black (hot), White (neutral) Output: 7.5"(±1.5") 18AWG solid wire, Red (positive), Blue (negative) Dimming: 8.5"(±1.5") 18AWG solid wire, Violet (Dim+), Grey (Dim-) |

Installation & Application Notes:

Section I – Physical Characteristics

- 1.1 LED Driver shall be installed inside an electrical enclosure
- 1.2 Wiring inside electrical enclosure shall comply with 600V/105°C rating or higher.

Section II – Performance

- 2.1 LED Driver has a rated lifetime of 50,000 hours @ TC ≤70C.
- 2.2 LED Driver tolerates sustained open circuit and short circuit output conditions without damage.
- 2.3 LED Driver maximum allowable case temperature is 80°C – see product label for measurement location.
- 2.4 LED Driver reduces output power to LEDs if its case temperature exceeds >80°C –thermal protection and eventually reduces output current to minimum current of the driver.

Revised 02/07/2012

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018
 Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance
 Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886



| LED277A0700C30DO | |
|-------------------------|-----------------------------|
| Brand Name | XITANIUM |
| Description | Xtanium 21W 0.7A 0-10V 277V |
| Input Voltage | 277 |
| Input Frequency | 60Hz |
| RoHS | Yes |
| Status | Active |

Electrical Specifications

Section III – UL Conditions of Acceptability

UL file number E220165 Vol1 Section 11. Main UL Standards used for Evaluation: UL8750, UL1310 and UL879.

When installed in the end product, consideration shall be given to the following:

- 3.1 This component has been judged on the basis of the required spacing's in the Standard for Electric Sign Component, UL 879, and Eighth Edition, which would cover the component itself if submitted for Listing.
- 3.2 The maximum available output electrical parameters of the driver met the Class 2 – Inherently Limited specified in UL 1310.
- 3.3 The unit is intended for installation inside an electrical enclosure.
- 3.4 The maximum available output current and power parameters of the driver met the limitation for Class 2 Inherently limited in accordance with the Canadian Standard CSA C22.2 No. 223.
- 3.5 The primary and secondary terminal blocks are R/C (XCFR2/XCFR8) suitable for field wiring.
- 3.6 The Driver has been evaluated for use in “Dry” and “Damp” locations.
- 3.7 When the driver is installed in the end-use application, the manufacturer has specified the measured case temperature at the (Tc) location specified on the marking label must not exceed 80°C.
- 3.8 The equipment shall be installed in compliance with the enclosure, mounting, spacing, casualty and segregation requirements of the end-product application.
- 3.9 The maximum measured leakage current using leakage current tester by Simpson Model 228 was 0.32 mA rms at 277V input.
- 3.10 The 0-10V dimming circuit has been evaluated as a Class 2 output.
- 3.11 The secondary output of all models and the 10V DC dimmer circuit of the Model LED277A0700C30DO are considered to be Class 2 circuits.

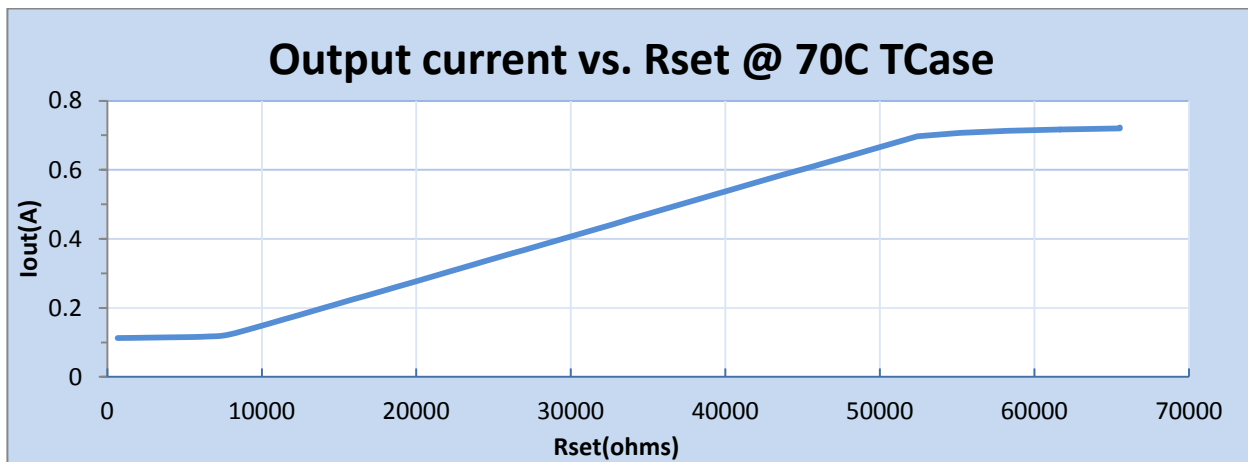
Revised 02/07/2012

LED277A0700C30DO

| | |
|-----------------|------------------------------|
| Brand Name | XITANIUM |
| Description | Xitanium 21W 0.7A 0-10V 277V |
| Input Voltage | 277 |
| Input Frequency | 60Hz |
| RoHS | Yes |
| Status | Active |

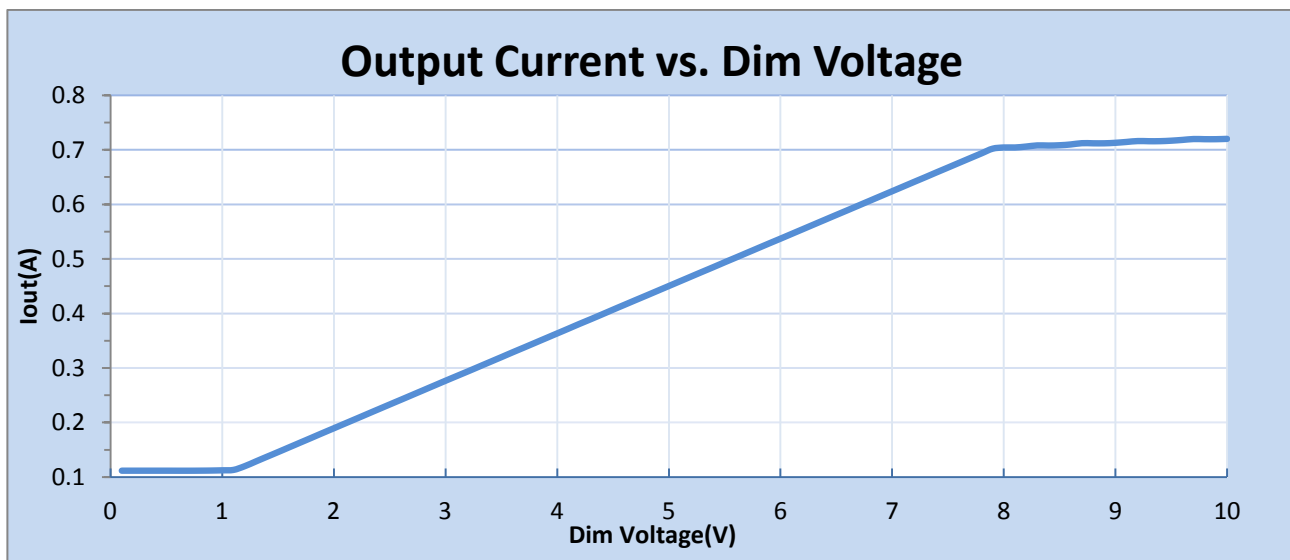
Electrical Specifications

Measured by placing a resistor between the DIM positive and DIM negative (as shown in wire diagram above) instead of a Mark VII Dimmer



Dim Voltage

Measured by placing a DC voltage instead of a Mark VII dimmer between the DIM positive and DIM negative

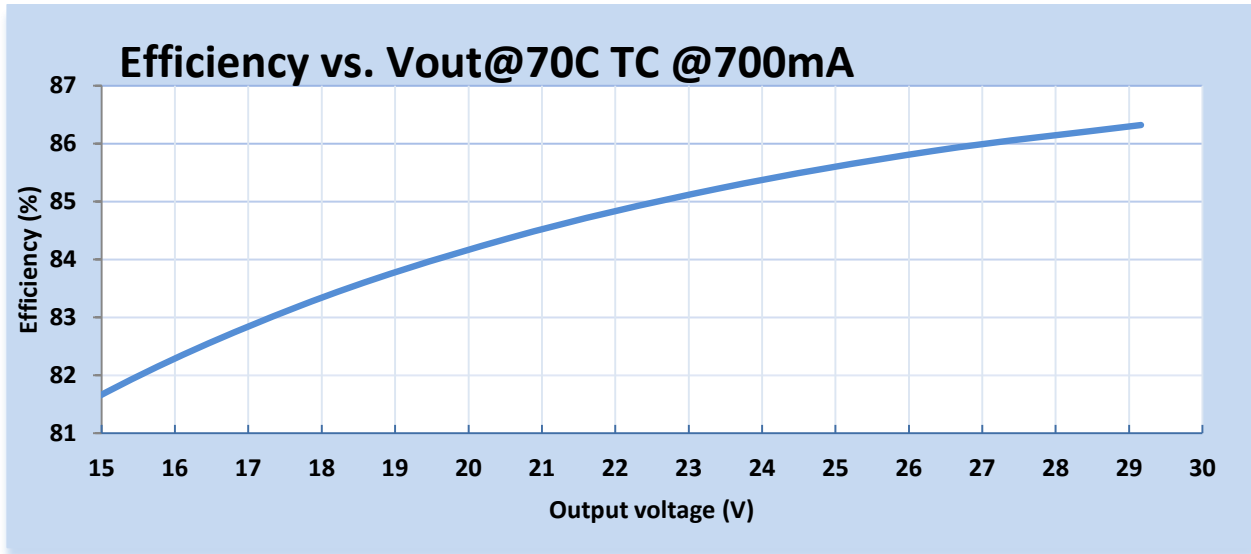


Revised 02/07/2012

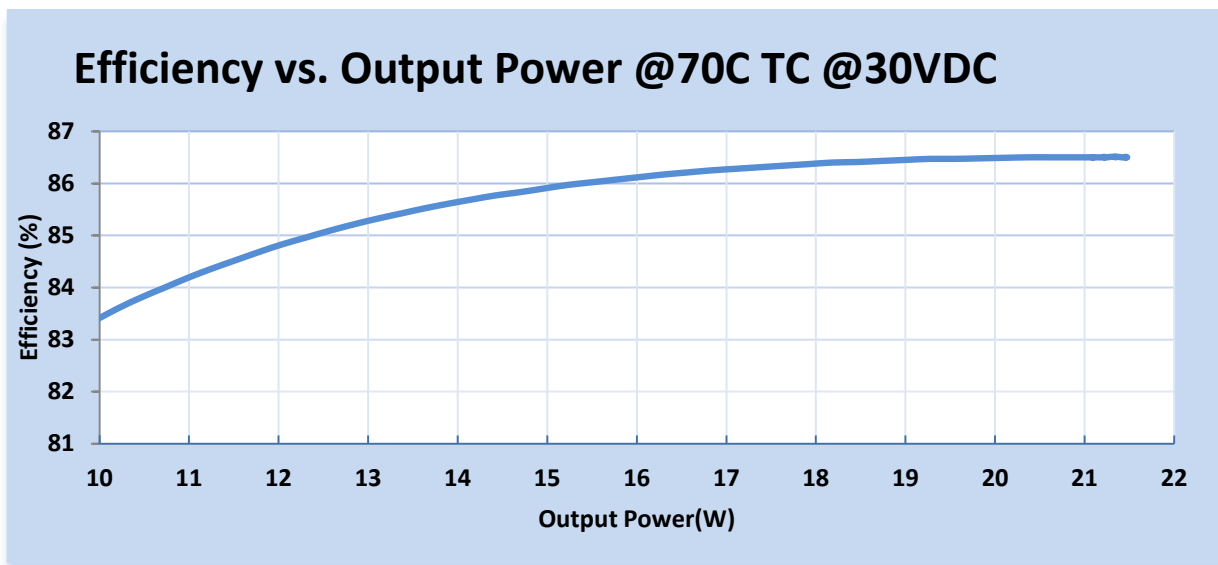
LED277A0700C30DO

| | |
|-----------------|-----------------------------|
| Brand Name | XITANIUM |
| Description | Xtanium 21W 0.7A 0-10V 277V |
| Input Voltage | 277 |
| Input Frequency | 60Hz |
| RoHS | Yes |
| Status | Active |

Electrical Specifications



For the plots below, output power is varied by changing the dim voltage from 1-10V keeping the load constant at 10 LED's



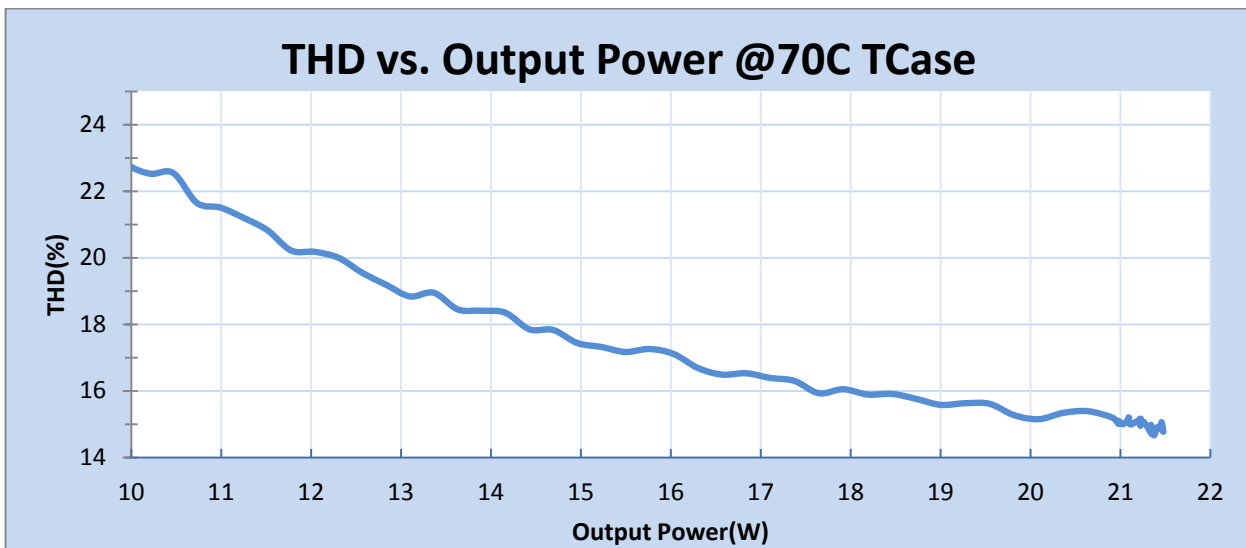
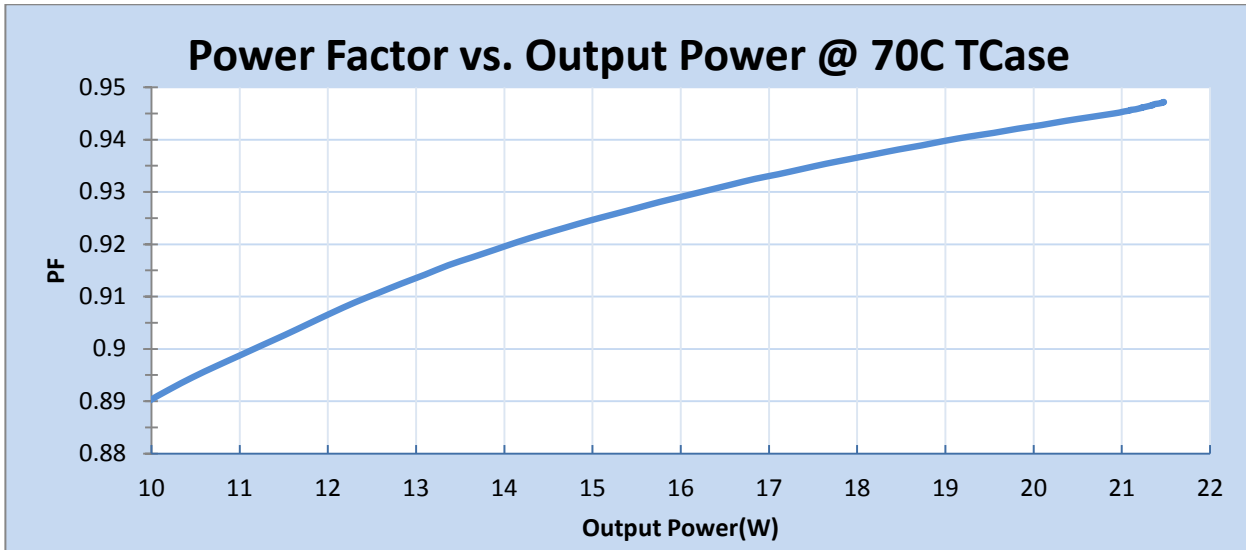
Revised 02/07/2012



LED277A0700C30DO

| | |
|-----------------|-----------------------------|
| Brand Name | XITANIUM |
| Description | Xtanium 21W 0.7A 0-10V 277V |
| Input Voltage | 277 |
| Input Frequency | 60Hz |
| RoHS | Yes |
| Status | Active |

Electrical Specifications



Revised 02/07/2012

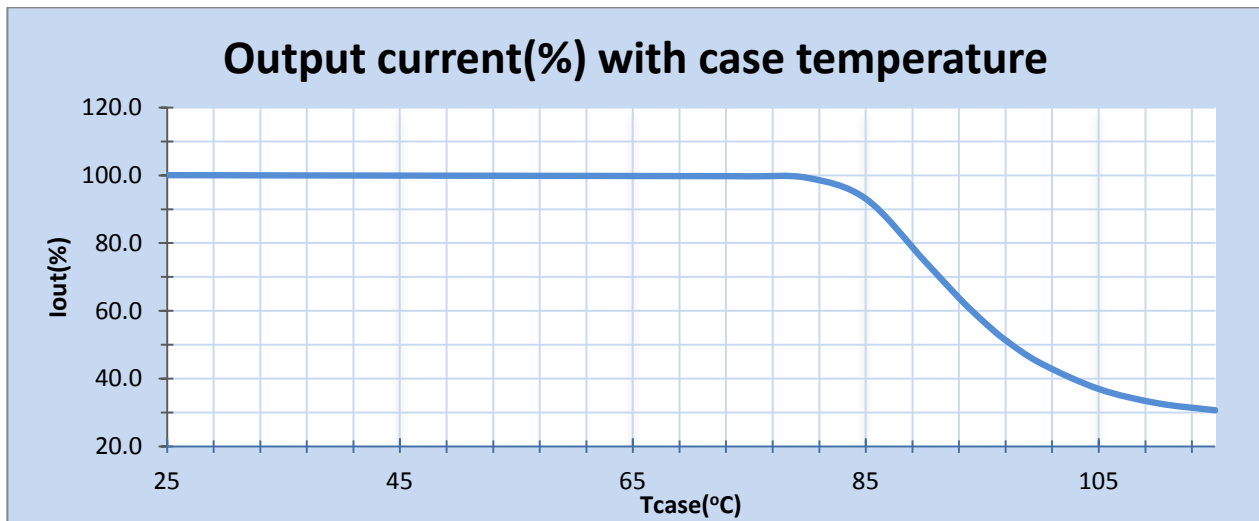
PHILIPS LIGHTING ELECTRONICS N.A.
10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018
Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance
Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886

LED277A0700C30DO

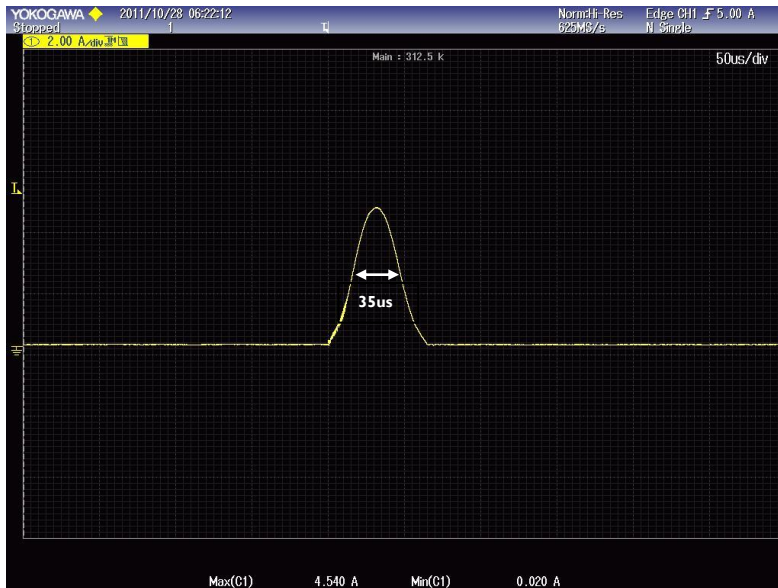
| | |
|-----------------|-----------------------------|
| Brand Name | XITANIUM |
| Description | Xtanium 21W 0.7A 0-10V 277V |
| Input Voltage | 277 |
| Input Frequency | 60Hz |
| RoHS | Yes |
| Status | Active |

Electrical Specifications

Iout vs. Tcase of the Driver:



Inrush Current Info:



| Vin | Ipeak | Total time |
|----------|-------|------------|
| 305 Vrms | 4.5A | 35 µs |

Revised 02/07/2012



LED277A0700C30DO

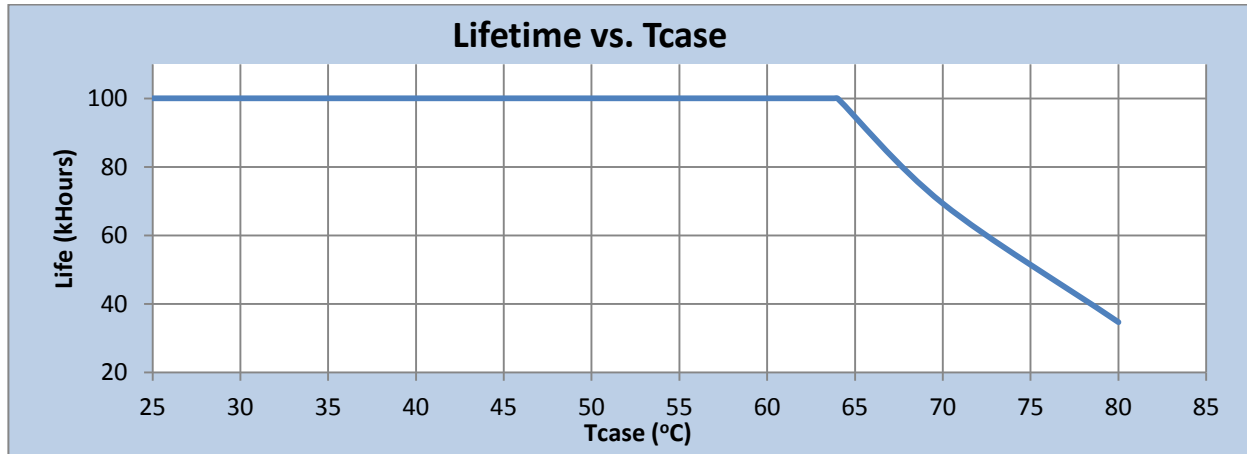
| | |
|-----------------|------------------------------|
| Brand Name | XITANIUM |
| Description | Xitanium 21W 0.7A 0-10V 277V |
| Input Voltage | 277 |
| Input Frequency | 60Hz |
| RoHS | Yes |
| Status | Active |

Electrical Specifications

Failure Rate Info:

- < 0.01% per 1 kHr @ <= Tcase 65 C

Lifetime vs. Tcase:



Isolation:

| | | | |
|--------------|-------------|--------------|-------------|
| Isolation | Input Wires | Output Wires | 0-10V Wires |
| Input Wires | NA | 1750Vrms | 1750 Vrms |
| Output Wires | 1750 Vrms | NA | NA |
| 0-10V Wires | 1750 Vrms | NA | NA |

Revision History:

| Rev No. | Date | Description | Approval | Remarks |
|---------|------------|--------------------------------|----------|---------|
| 1.1 | 01/17/2012 | * Add Envir. Protection Rating | N.T | |
| | | | | |
| | | | | |

Revised 02/07/2012

PHILIPS LIGHTING ELECTRONICS N.A.

10275 WEST HIGGINS ROAD · ROSEMONT, IL 60018

Tel: 800-322-2086 · Fax: 888-423-1882 · www.philips.com/advance

Customer Support/Technical Service: 800-372-3331 · OEM Support: 866-915-5886