



### Features

- 3 drive current options available – 700mA, 1050mA, 1200mA, with UL Class 2 output
- 0-10V dimming
- Compact housing

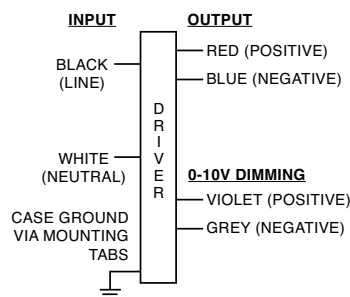
### Benefits

- Flexibility of design via multiple drive currents and low voltage
- Helps to maximize energy savings and allows application specific light levels
- Enables design of low profile and compact fixtures

### Dimensions

|                 | in.  | mm     |
|-----------------|------|--------|
| Case Length     | 5.47 | 138.9  |
| Case Width      | 1.81 | 46.0   |
| Case Height     | 1.11 | 28.2   |
| Mounting Length | 5.67 | 144.0  |
| Mounting Width  | 1.08 | 27.4   |
| Overall Length  | 5.93 | 148.25 |

### Wire Diagram



| Dimming                     | Dimming Range | Minimum Output Current (A) | Other Comments                      |
|-----------------------------|---------------|----------------------------|-------------------------------------|
| 0-10V Analog Class 2 Wiring | 10% ~ 100%    | 0.120                      | Dimming source current: 150 $\mu$ A |

### Product Data

Input and output use lead-wires.

Lead-wires are 18AWG 105C/600V solid copper per UL1452.

Lead Length outside enclosure: 270 mm ( $\pm$ 30mm) on all wires.

| Input Voltage (Vac) | Output Power (W) | Output Voltage Range (V) | Output Current (A) | Efficiency@ Max Load and 70°C Case | Max Case Temp. (°C) | Input Current (Arms) | Max. Input Power (W) | Inrush Current (A <sub>pk</sub> /50%- $\mu$ s) | THD @ Max Load (%) | Power Factor @ Max Load | Surge Protection Common/Diff (KV) | Weight (Lbs/kgs) | Envir. Protection Rating |
|---------------------|------------------|--------------------------|--------------------|------------------------------------|---------------------|----------------------|----------------------|--|--------------------|-------------------------|-----------------------------------|------------------|--------------------------|
| 120                 | 43               | 12 - 36                  | 1.20               | 85                                 | 80°C                | 0.45                 | 56                   | 25 / 100                                       | <8%                | >0.95                   | 4/4                               | 1.0/ 0.45        | UL damp and dry          |
| 277                 |                  |                          |                    | 88                                 |                     | 0.20                 |                      | 65 / 100                                       | <12%               |                         |                                   |                  |                          |



# Xitanium XI040C120V035CNJ1

40W 1.20A 0-10V INT-J

## Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

| <b>Ordering Information</b>                                   |   |
|---|---|
| Order code  | XI040C120V035CNJ1   |
| Full product code   | XI040C120V035CNJ1M (Mid-Pack, 12pcs/Box)                          |
| Full product name   | XITANIUM 40W 1.20A 0-10V INT-J                                    |
| <b>Input Information</b>                                      |   |
| Line Voltage  | 120-277Vac_rms  |
| Line Current  | 0.45A @ 120V, 0.20A @ 277V  |
| Line Frequency  | 50/60Hz   |
| Min. Mains voltage operational                                | 108 V [min]   |
| Max. Mains voltage operational                                | 305V [max]  |
| THD (total)   | Refer to graph  |
| Power Factor (PF)   | Refer to graph  |
| Inrush Current  | Per NEMA 410  |
| Lightning Surge Protection                                    | Refer to table below  |
| <b>Output Information</b>                                     |   |
| Output voltage range  | 12V to 36Vdc  |
| Maximum open circuit voltage                                  | 38V   |
| Output Current Ripple<br>(ripple = peak to average / average) | 10% max @ max lout<br>Low frequency ( $\leq 120$ Hz) content <5%  |
| Protections   | Short Circuit and Open Circuit Protection for LED + and LED-      |
| Ambient Temp Range  | -40°C to +55°C  |
| Max Case Temperature (Tcase)                                  | 80°C  |
| <b>Features</b>   |   |
| Interfaces  | 0-10V Dimming   |
| AOC (Adjustable Output Current)                               | N/A   |
| MTP (Module Temperature Protection)                           | N/A   |
| 0-10V Dimming Specifications                                  | 150 $\mu$ A source current from driver, See dim curve for detail. |
| <b>Environment &amp; Approbation</b>                          |   |
| Environmental Protection Rating                               | UL damp and dry   |
| Agency Approbations   | UL8750, UL1310, UL935, CSA-C22.2 No. 250.13-12, CSA C22.2 No. 223 |
| Electromagnetic Compliance                                    | FCC Title 47 Part 15 Class A                                      |
| Isolation   | Refer to table  |
| Audible noise   | <24dB Class A   |

# Xitanium XI040C120V035CNJ1

40W 1.20A 0-10V INT-J

## Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

### 0-10V Dimming Curve:

Dimming source current from the driver: 150µA (@ 0<Vdim<8V)

LED Current Tolerance at 1200mA ≤ 5% over temperature and component variations and ≤ 10% at any dim level.

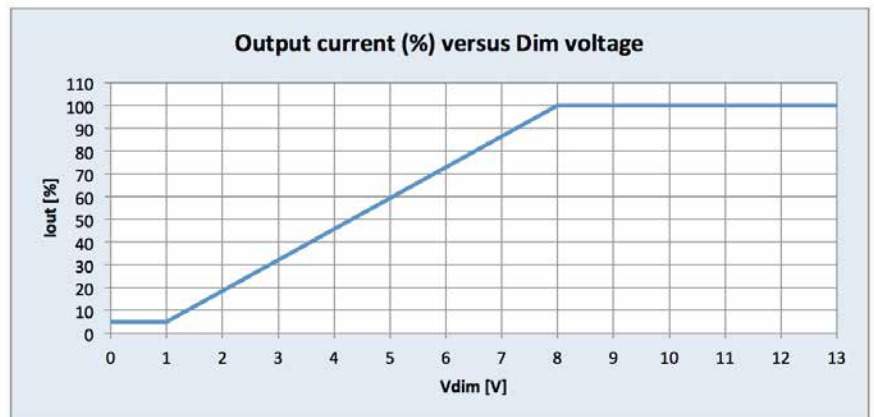
Minimum Dim Level: 10% of Iout (minimum 120mA)

Maximum output voltage on the dimming wires: 13V

## Approved Dimmer List

| Manufacturer | Manufacturer Part Number  |
|--------------|---|
| Lutron       | Visit <a href="http://www.lutron.com/advance">www.lutron.com/advance</a> for a list of dimmers (Mark VII) that will work with this driver |
| Leviton      | IllumaTech IP7 series   |
| Advance      | Sunrise - SRI200ZTUNV   |

For compatibility with other dimmers please contact the dimmer manufacturer.



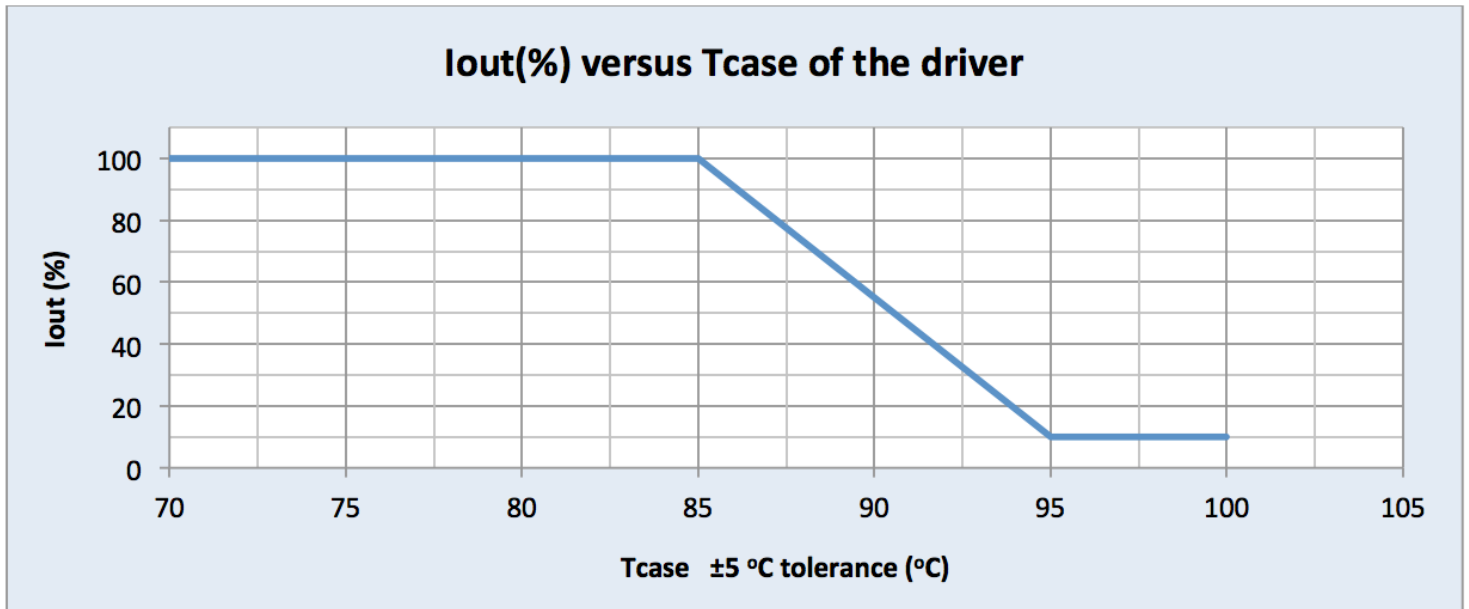
# Xitanium XI040C120V035CNJ1

40W 1.20A 0-10V INT-J

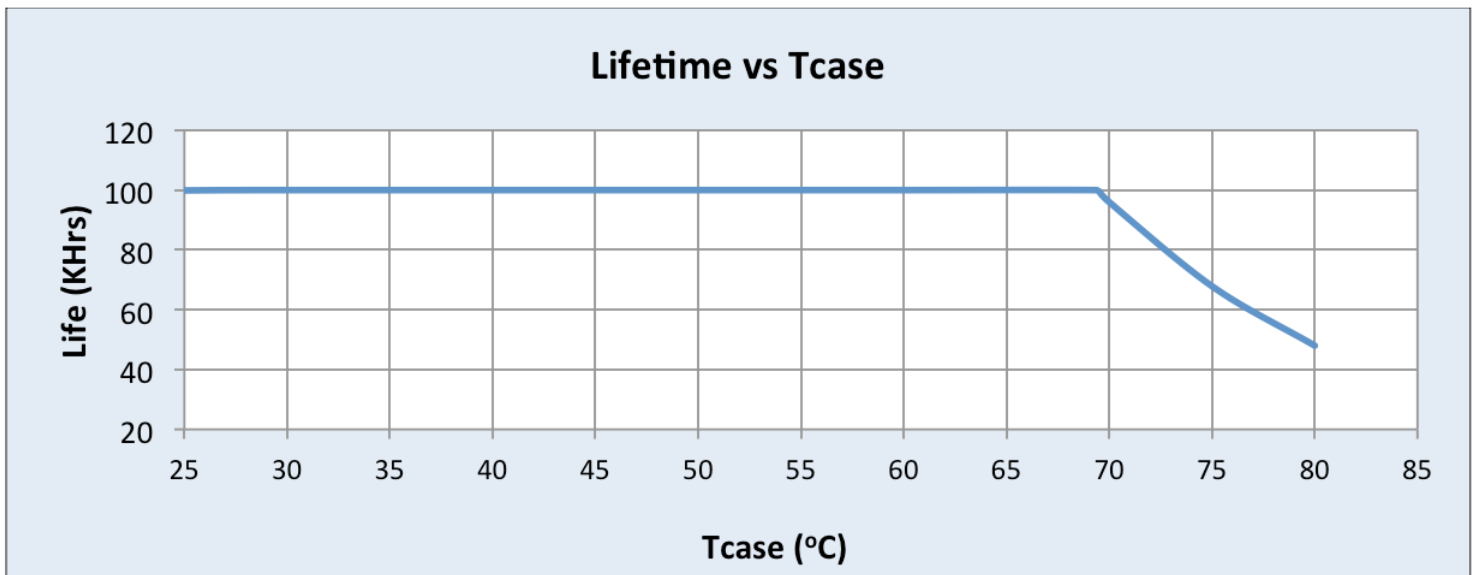
## Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

### Iout vs. Tcase of Driver:



### Lifetime vs. Tcase of Driver:



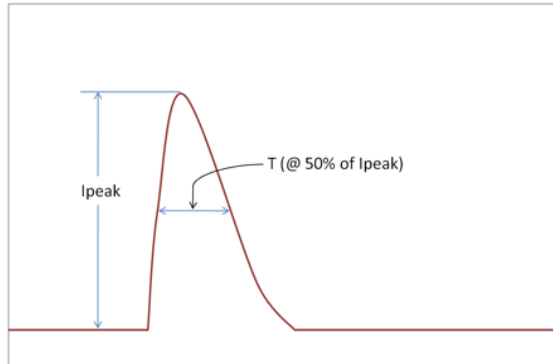
# Xitanium XI040C120V035CNJ1

40W 1.20A 0-10V INT-J

## Electrical Specifications

All the specifications are typical and at 25°C Tcase unless specified otherwise.

## Inrush Current Info:



| Vin      | Ipeak | T (@ 50% of Ipeak) |
|----------|-------|--------------------|
| 120 Vrms | 25 A  | 100 μs             |
| 277 Vrms | 65 A  | 100 μs             |

Inrush current is measured at peak of the corresponding line voltage, source impedance per NEMA 410.

## Lightning Surge Info:

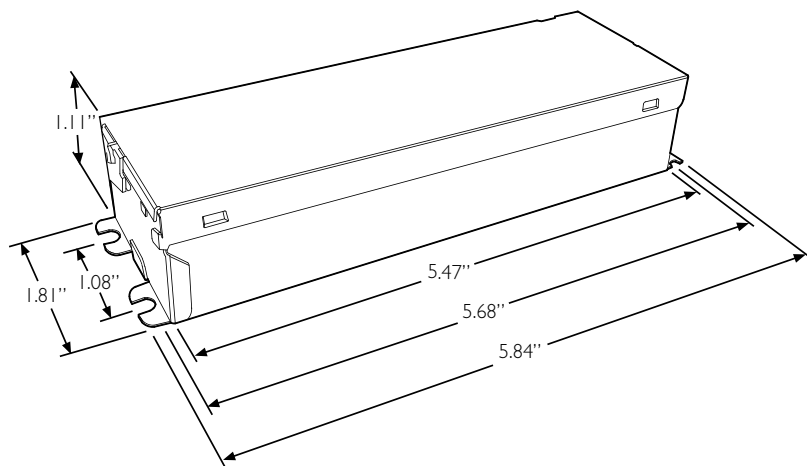
| ANSI Surge Type                             | Differential Mode (L-N) | Common Mode (L-G, N-G, L&N-G) |
|---|-------------------------|-------------------------------|
| 100 kHz Ring Wave (w/t 30Ω)                 | 6kV                     | 6kV                           |
| 1.2/50μs - 8/20μs Combination Wave (w/t 2Ω) | 4kV                     | 4kV                           |

# Xitanium XI040C120V035CNJ1

40W 1.20A 0-10V INT-J

## Mechanical Specifications

### Mechanical Drawing:



J-CAN

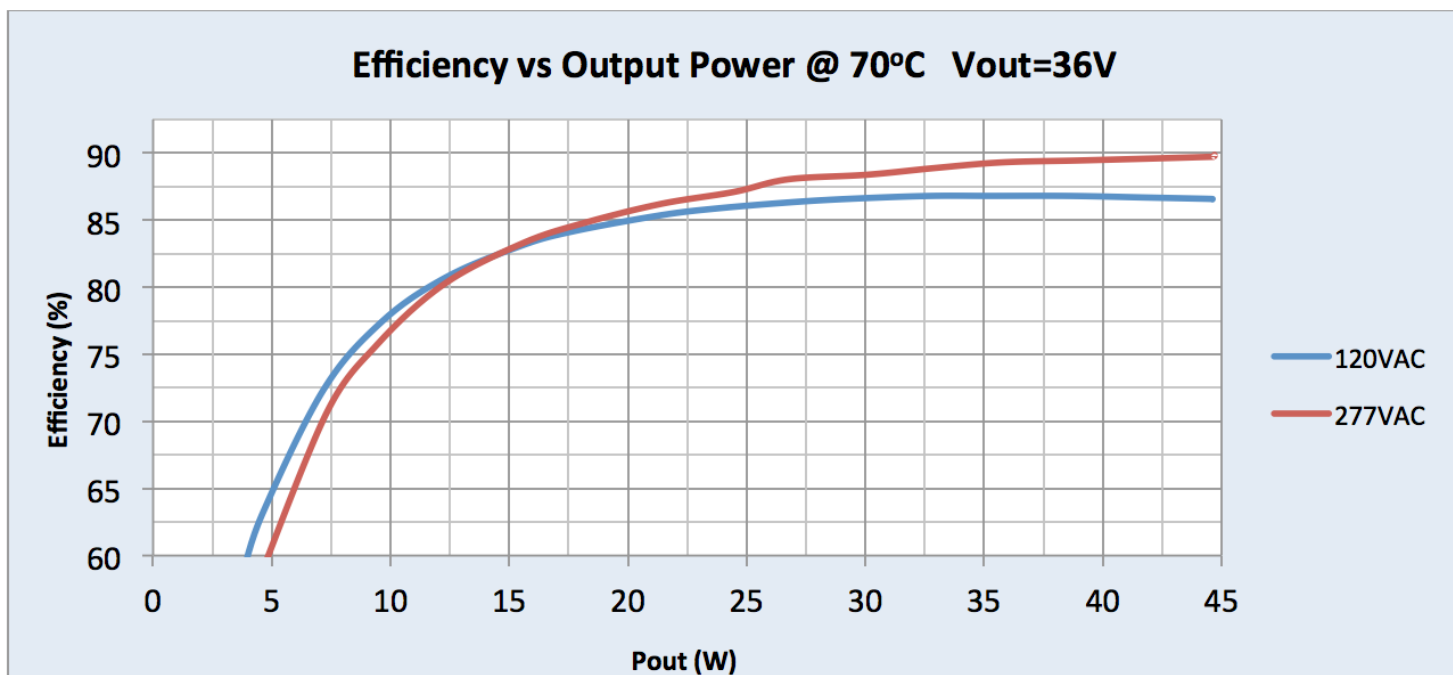
# Xitanium XI040C120V035CNJ1

40W 1.20A 0-10V INT-J

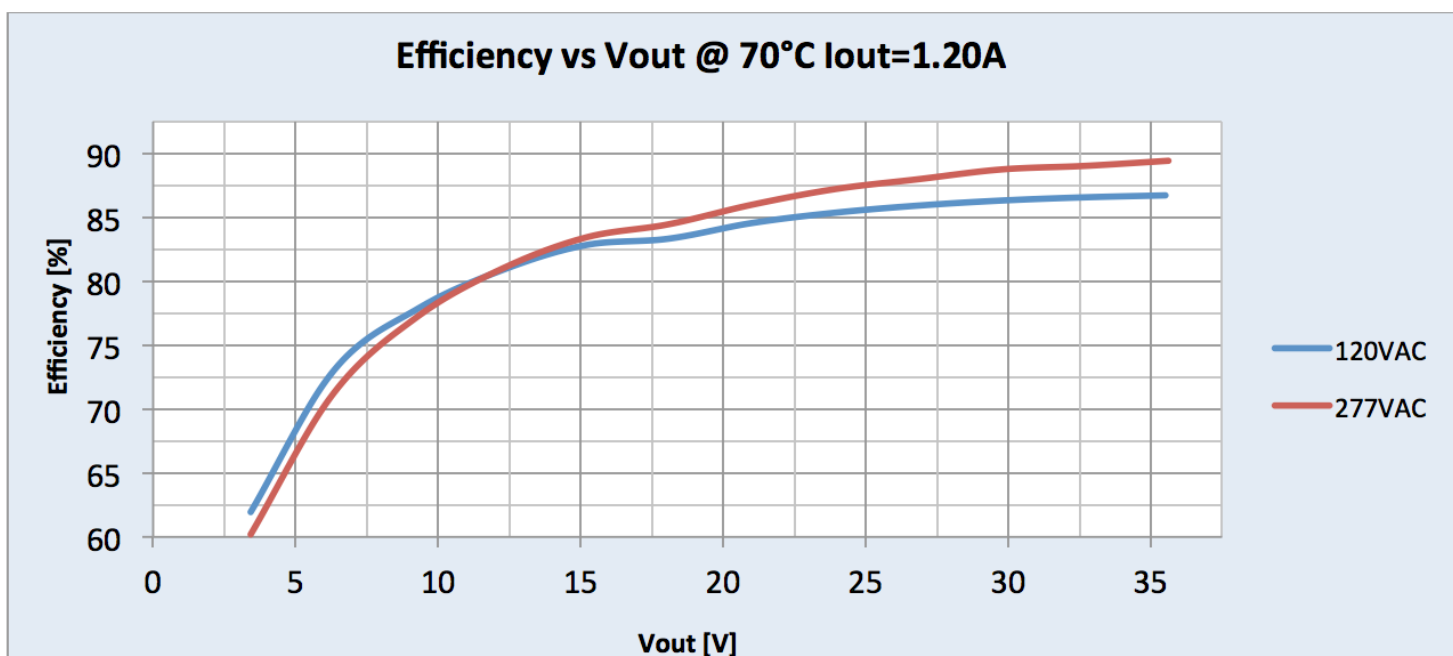
## Performance Characteristics

Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.

### Efficiency vs Output Power @ 70°C Vout=36V



### Efficiency vs Vout @ 70°C Iout=1.20A

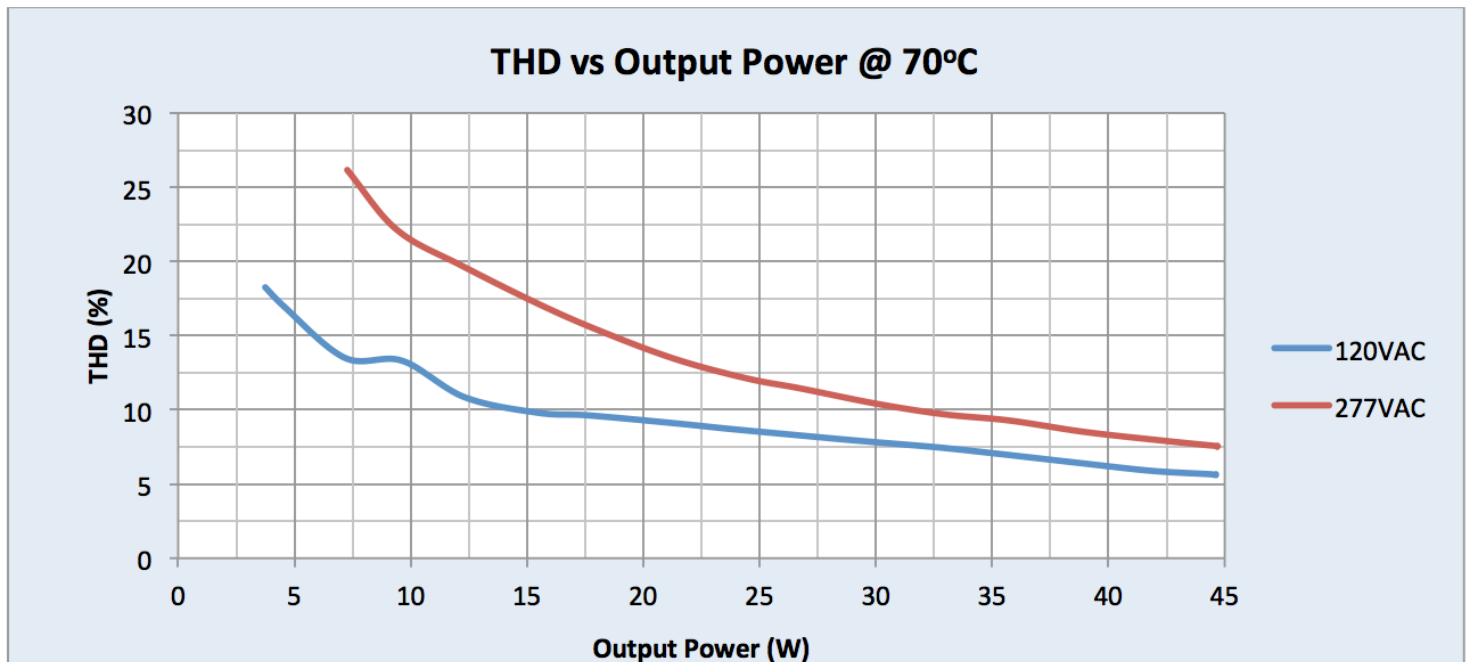
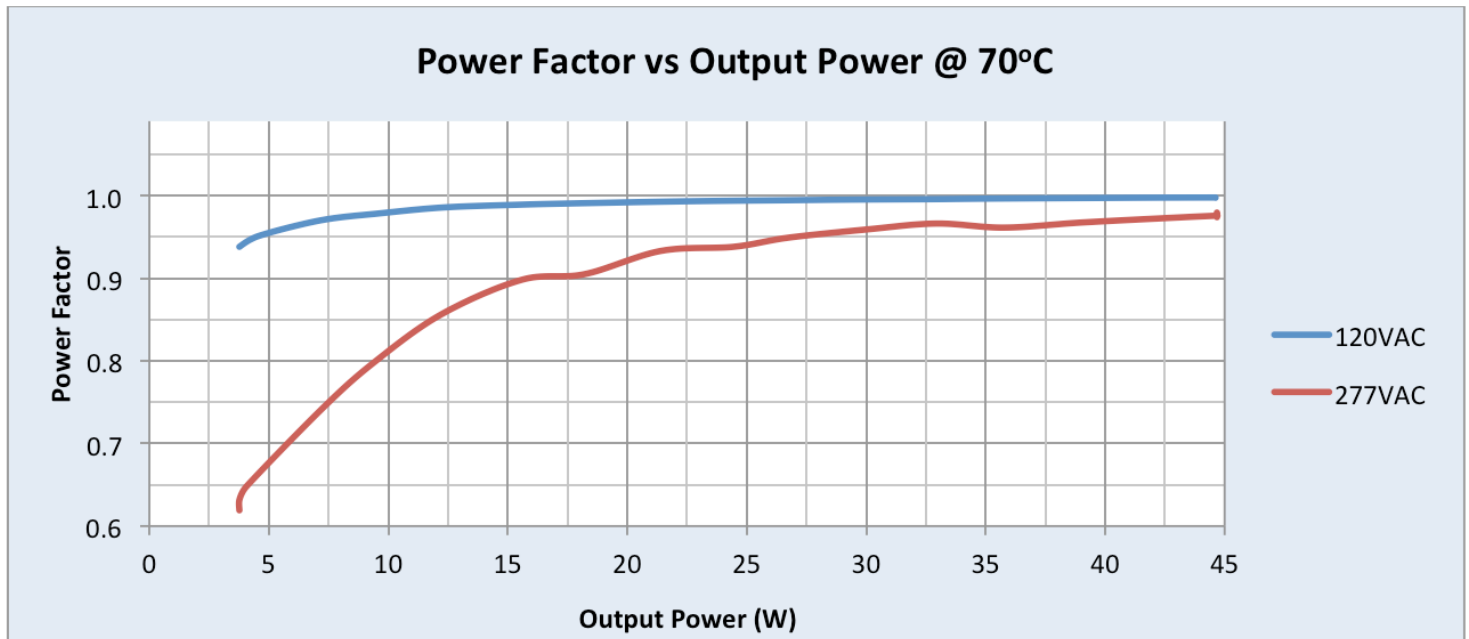


# Xitanium XI040C120V035CNJ1

40W 1.20A 0-10V INT-J

## Performance Characteristics

Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.





# Xitanium XI040C120V035CNJ1

40W 1.20A 0-10V INT-J

## Application Notes

### Isolation:

| Isolation       | Input          | Output         | 0-10V (Class 2) | Enclosure      |
|-----------------|----------------|----------------|-----------------|----------------|
| Input           | Not applicable | 2xU+1KV        | 2.5KVac         | 2xU+1KV        |
| Output          | 2xU+1KV        | Not applicable | Not applicable  | 500V           |
| 0-10V (Class 2) | 2.5KVac        | Not applicable | Not applicable  | 500V           |
| Enclosure       | 2xU+1KV        | 500V           | 500V            | Not applicable |

### UL Conditions of Acceptability:

Please contact your sales representative for a copy of the latest UL Conditions Of Acceptability (COA).

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

