

Philips Advance Xtanium LED Driver

PHILIPS ADVANCE XITANIUM LED DRIVER SPEC SHEET



XITANIUM 100W 2.30A INT-S
XI100C230V042FNS1

Features

- UL Class 2 output, high drive current (2.3A)
- Available in both Fixed and Dimmable version

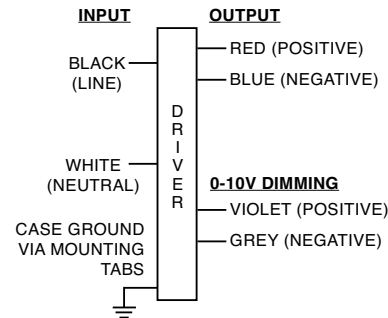
Benefits

- Tailored specifically for various COB arrays
- Helps to maximize energy savings and allows application specific light levels

Dimensions

	in.	mm
Case Length	8.37	212.6
Case Width	1.70	43.2
Case Height	1.14	29.0
Mounting Length	8.89	225.8
Mounting Width	1.22	31.0

Wire Diagram



Product Data

Input and output use lead-wires.

Lead-wires are 18AWG solid copper:

105°C/600V per UL1316 and 90°C/1000V per UL1452.

Lead Length outside enclosure:

280 mm (+50.8mm -25.4mm) 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 (Apk/ 50%-µs)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection Common/ Diff (KV)	Weight (Lbs/ kgs)	Envir. Protection Rating
120	96.6	21 - 42	2.30	85	90°C	0.95	123	36.5 / 100	<8%	>0.95	4/4	1.48/ 0.67	UL damp and dry
277				88		0.40		82.5 / 100	<12%				



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Electrical Specifications

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

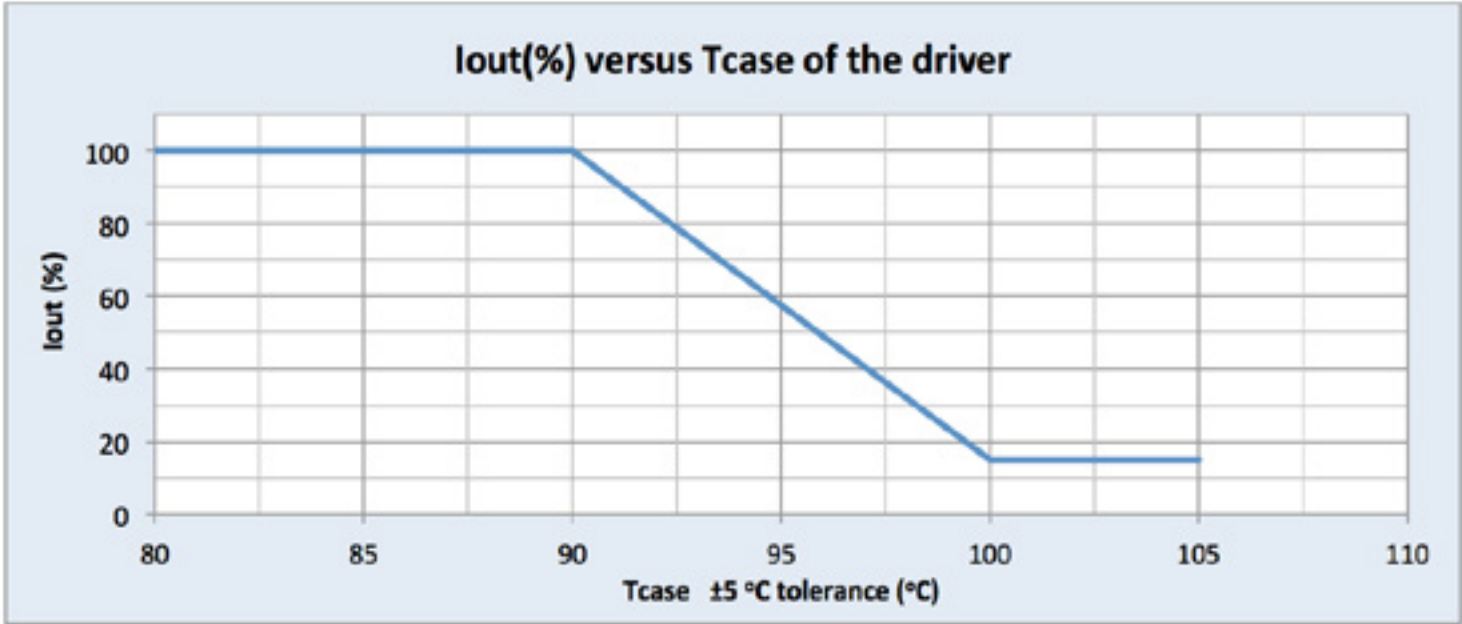
Ordering Information	
Order code	XI100C230V042FNS1
Full product code	XI100C230V042FNS1M (Mid-Pack, 10pcs/Box)
Full product name	XITANIUM 100W 2.30A INT-S
Input Information	
Line Voltage	120-277Vac_rms
Line Current	0.95A @ 120V, 0.40A @ 277V
Line Frequency	50/60Hz
Min. Mains voltage operational	108 V [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
Output Information	
Output voltage range	21V to 42Vdc
Maximum open circuit voltage	42V (±5%)
Output Current Ripple (ripple = peak to average / average)	10% max @ max lout Low frequency (≤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)	90°C
Features	
Interfaces	N/A
AOC (Adjustable Output Current)	N/A
MTP (Module Temperature Protection)	N/A
0-10V Dimming Specifications	N/A
Environment & Approbation	
Environmental Protection Rating	UL damp and dry
Agency Approbations	UL8750, ULI310, 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

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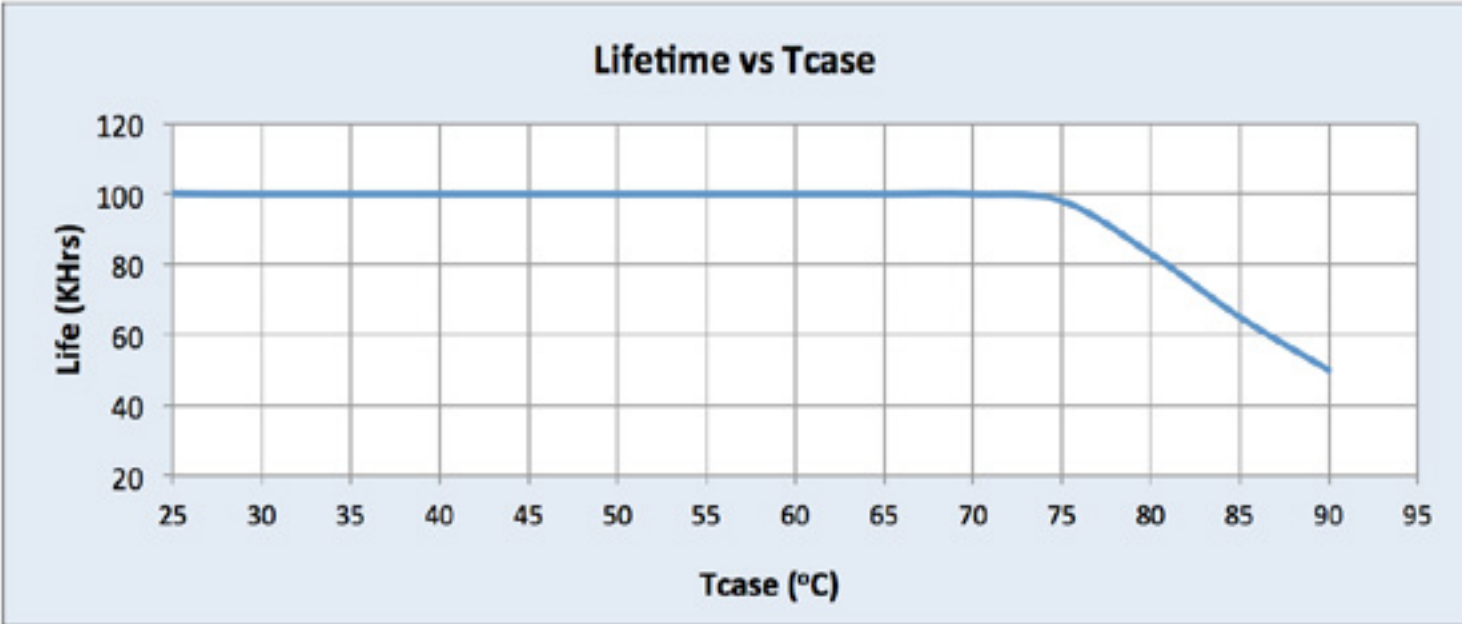
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Iout vs. Tcase of Driver:



Lifetime vs. Tcase of Driver:

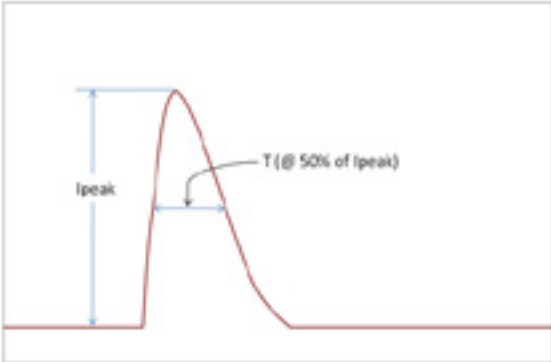


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Inrush Current Info:



Vin	Ipeak	T (@ 50% of Ipeak)
120 Vrms	36.5 A	100 μ s
277 Vrms	82.5 A	100 μ s

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

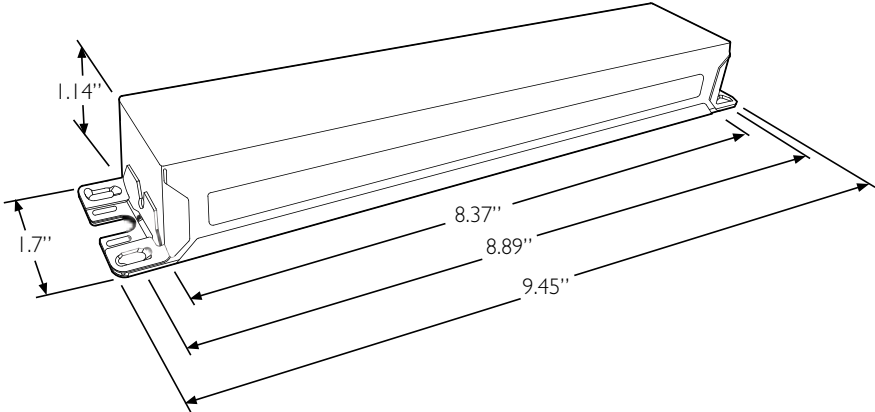
Lightning Surge Info:

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

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Mechanical Specifications

Mechanical Drawing:

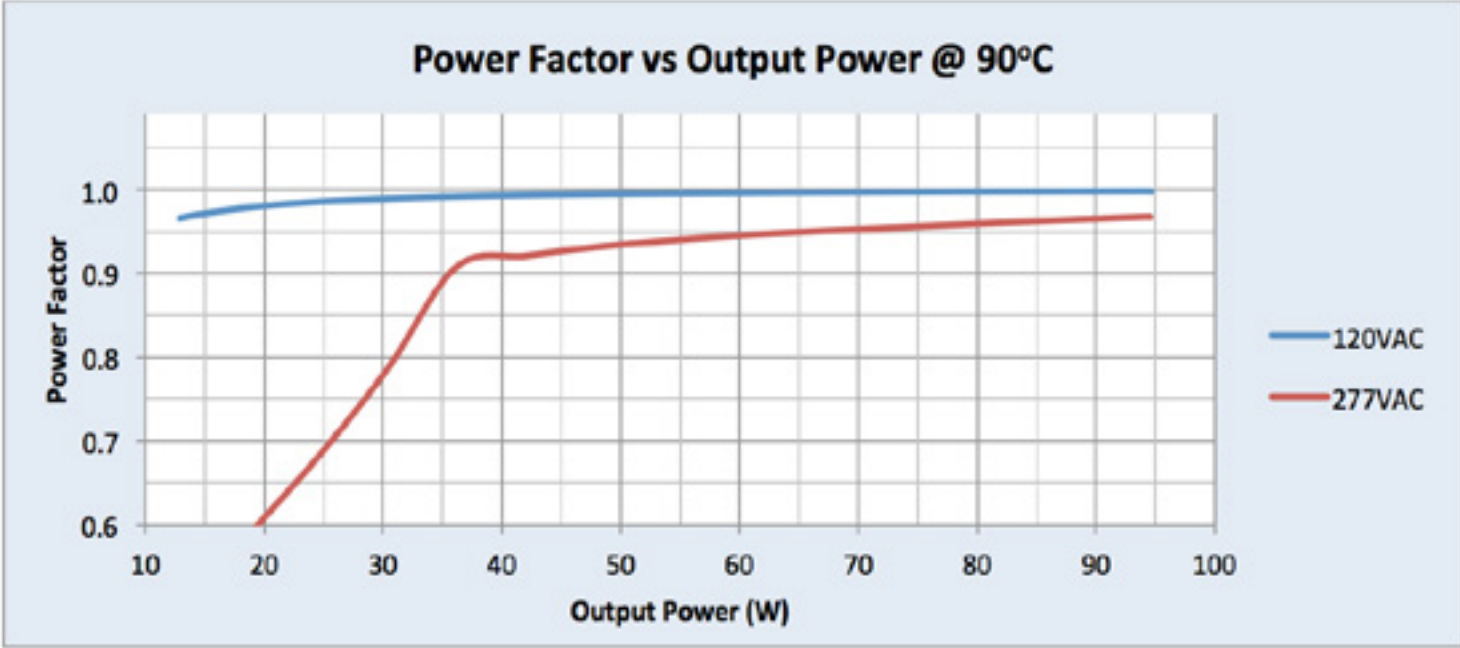
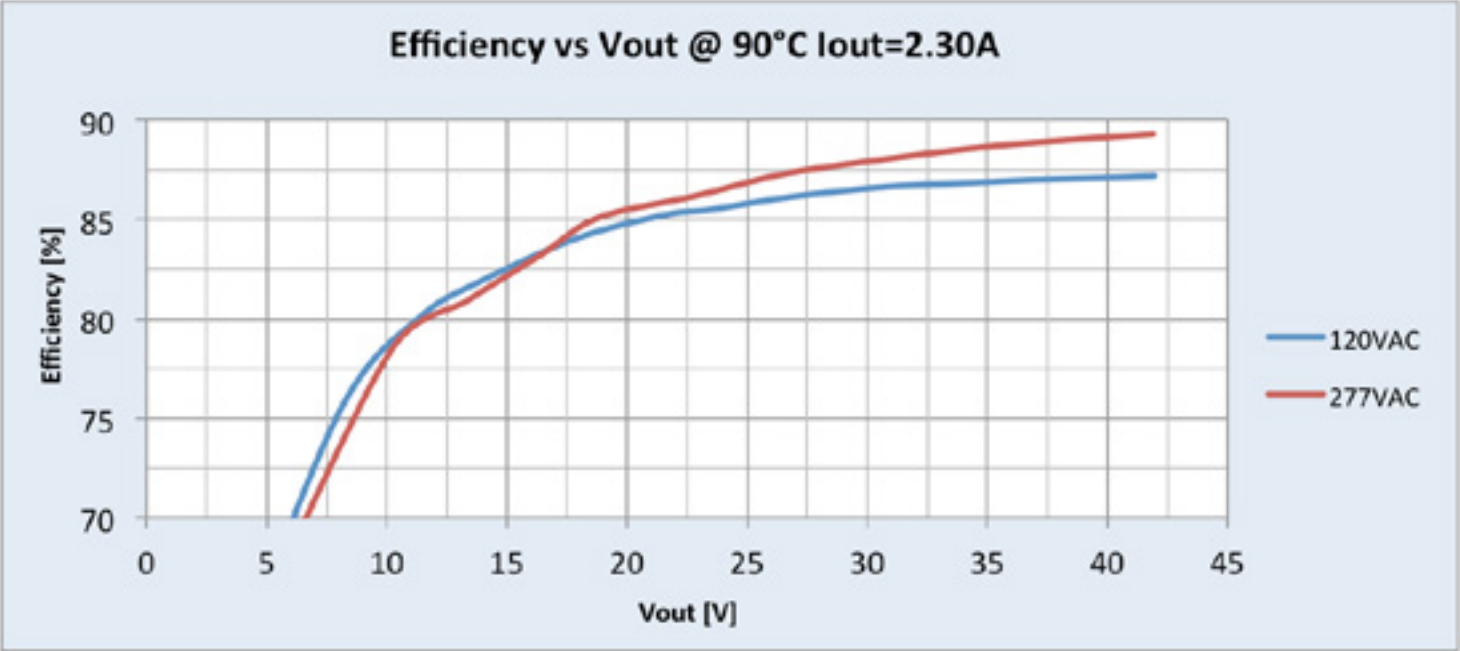


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Performance Characteristics

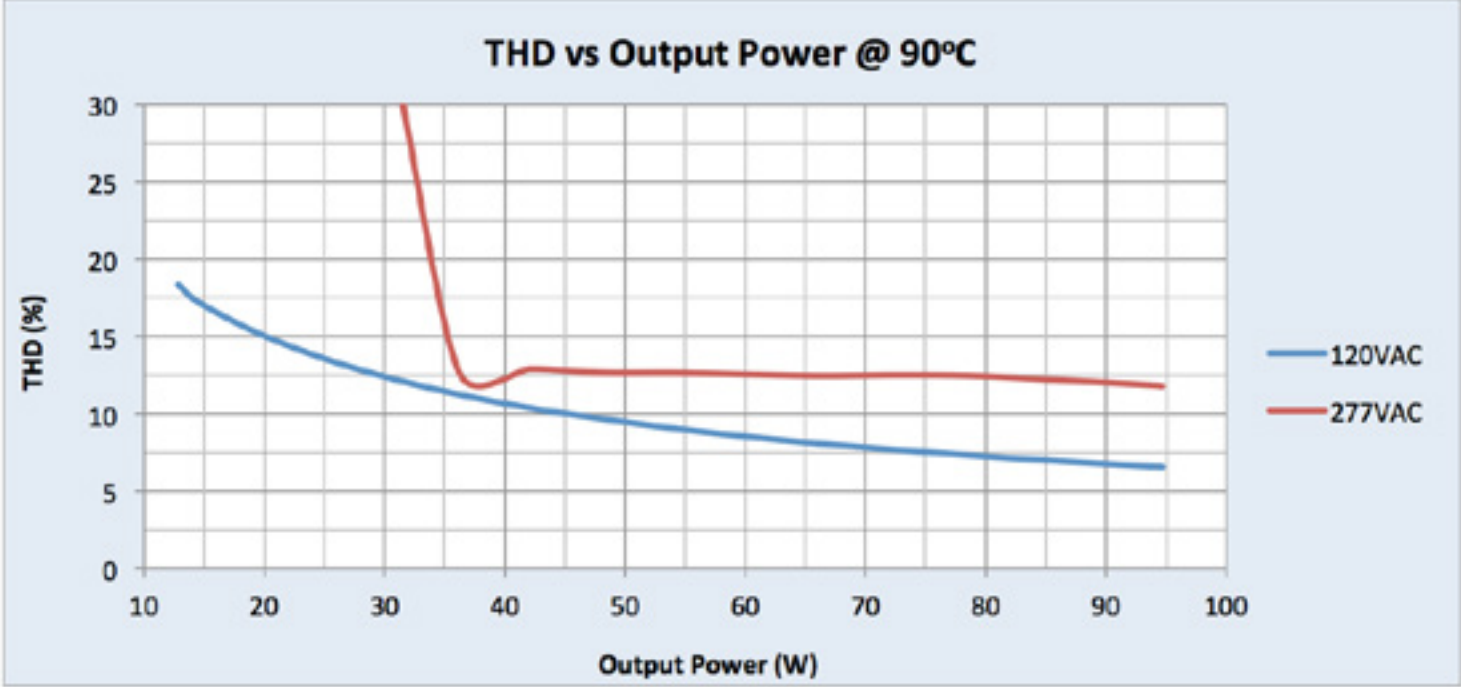
Based on measurements on a typical sample. The accuracy of the measurements is within the tolerance of the measurement instruments. The graphs are meant to be a guideline and not a specification.



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Application Notes

Isolation:

Isolation	Input	Output	Enclosure
Input	Not applicable	2xU+1KV	2xU+1KV
Output	2xU+1KV	Not applicable	500V
Enclosure	2xU+1KV	500V	Not applicable

UL Conditions of Acceptability:

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



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