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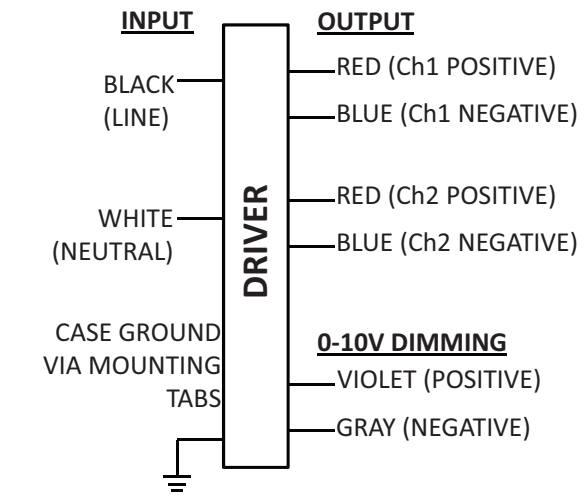
Product Overview

XI100C150V038CNH1	
Brand Name	XITANIUM
Description	XITANIUM 100W 1.5A 0-10V INT-H SXT
Input Voltage	120 - 277V
Input Freq.	50/60Hz
RoHS	Yes
Status	Released

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	2x50 W	20 – 36	1.50	87	80 °C	1.0	120	50 / 150	<10%	>0.95	4/4	1.9/ 0.9	UL damp and dry
277				89		0.4		120 / 150					

Wiring Diagram



Product Data:

Input and output use lead- wires.
Input Lead-wires
18AWG 105C/600V 16x30 stranded copper per UL1452, with Flag Terminals (Tyco PN 62813-2)
178mm (±35mm) outside the enclosure
Output Lead-wires:
18AWG 105C/600V solid copper per UL1452.
305mm (±35mm) outside the enclosure
Dimming Lead-wires
18AWG 105C/600V solid copper per UL1452.
305mm (±35mm) outside the enclosure

Dimming	Dimming Range	Minimum Output Current (A)	Other Comments
0-10V Isolated Class 1 or 2 Wiring Shutdown= Yes (see specification)	10% ~ 100%	0.150	Dimming source current: 150 µA (±3%)

Enclosure

	in. (mm)
Case Length	5.7 (144.7)
Case Width	3.6 (91.4)
Case Height	1.5 (38.2)
Mounting Length	5.96 (151.5)
Mounting Width	2.87 (73)
Overall Length	6.32 (160.5)

Class 2 Power Unit Dry & Damp location

Revised 03/08/2013

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Electrical Specifications

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Order code	XI100V150V038CNH1M
Full product code	XI100V150V038CNH1M
Full product name	XITANIUM 100W 1.5A 0-10V INT-H SXT
Line Voltage	120-277Vac rms
Line Current	1.0A @ 120V, 0.4A @ 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
Input Over-voltage	Can survive input over-voltage stress of 320VAC for 48 hours and 350VAC for 2 hours
Lightning Surge Protection	Per IEEE C62.41.2 2002 (4KV, 1.2/50 µs.8/20 µs Combination Wave with 2 Ohms source impedance, L-N, L-PE, N-PE)
Output voltage range	20V to 36Vdc
Maximum open circuit voltage	38V
Output Current Ripple (ripple = peak to peak / average)	10% max @ max Iout and max Vout Low frequency (≤120 Hz) content <5%
Protections	Short Circuit and Open Circuit Protection for LED + and LED-
Ambient Temp Range	-40C to +55C
Max Case Temperature (Tcase)	80C
Encapsulation	Yes, Fully potted
Interfaces	0-10V Dimming
AOC (Adjustable Output Current)	N/A
MTP (Module Temperature Protection)	N/A
0-10V Dimming Specifications	150µA ± 3% source current from driver, Vdim > 14.5V to shutdown driver. See dim curve for detail.
Standby power	< 0.5W
Environmental Protection Rating	UL damp and dry
Life @ Tcase 70C	refer to graph below
Life @ Tcase 80C	refer to graph below
Agency Approbations	UL8750, UL1012, UL935, CSA C22.2 No. 250.13-12, CSA C22.2 No. 107
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Isolation	Refer to table

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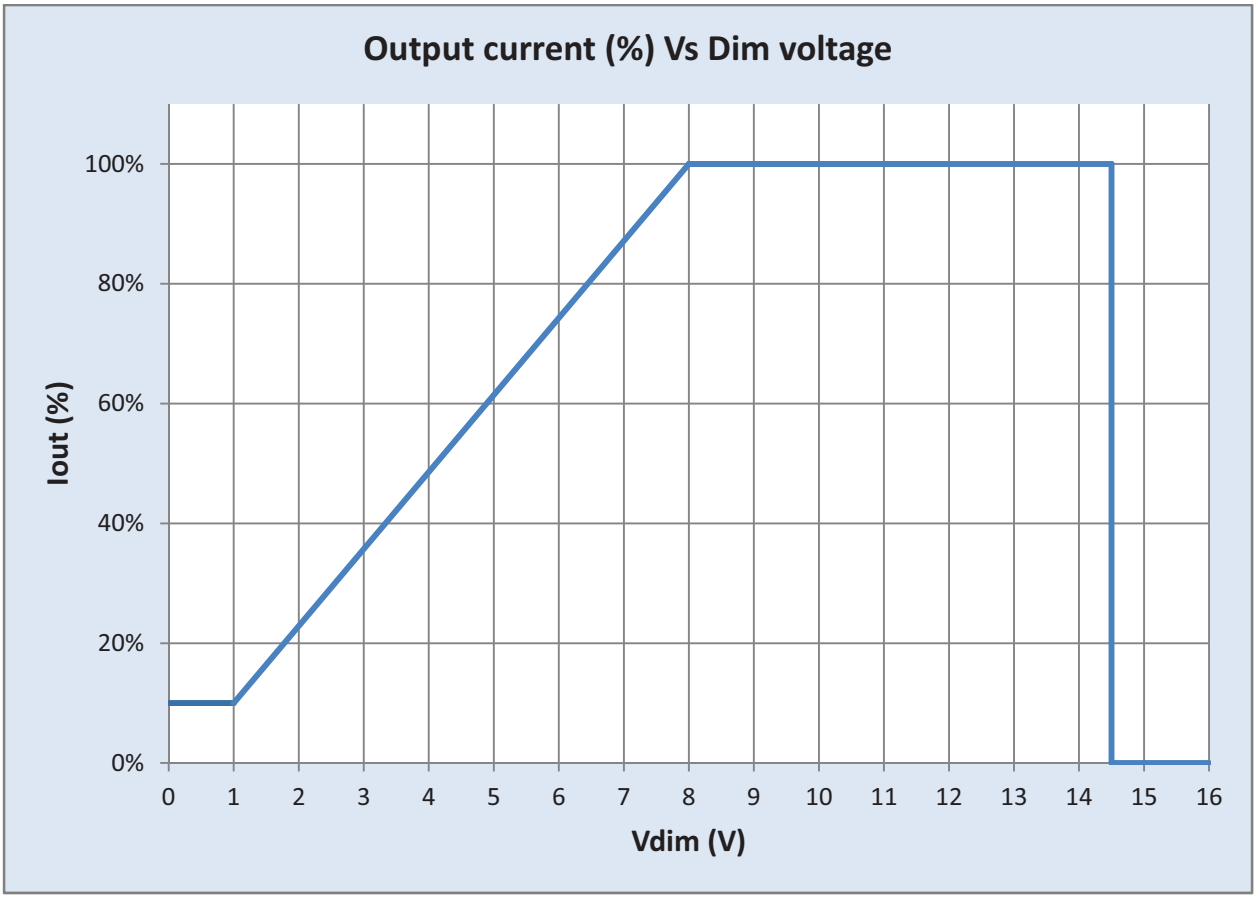
0-10V Dimming Curve:

Dimming source current from the driver: 150µA (±3%) (@ 0<Vdim<8V)
LED Current Tolerance at 530mA ≤ 5% over temperature and component variations and ≤ 10% at any dim level.
Minimum Dim Level: 10% of Iout (minimum 35mA)
Guaranteed Shutdown driver with Vdim>14.5V
Typ. sink current: 3mA (4mA Max) at 16V dim
Guaranteed no shutdown driver with Vdim<12V



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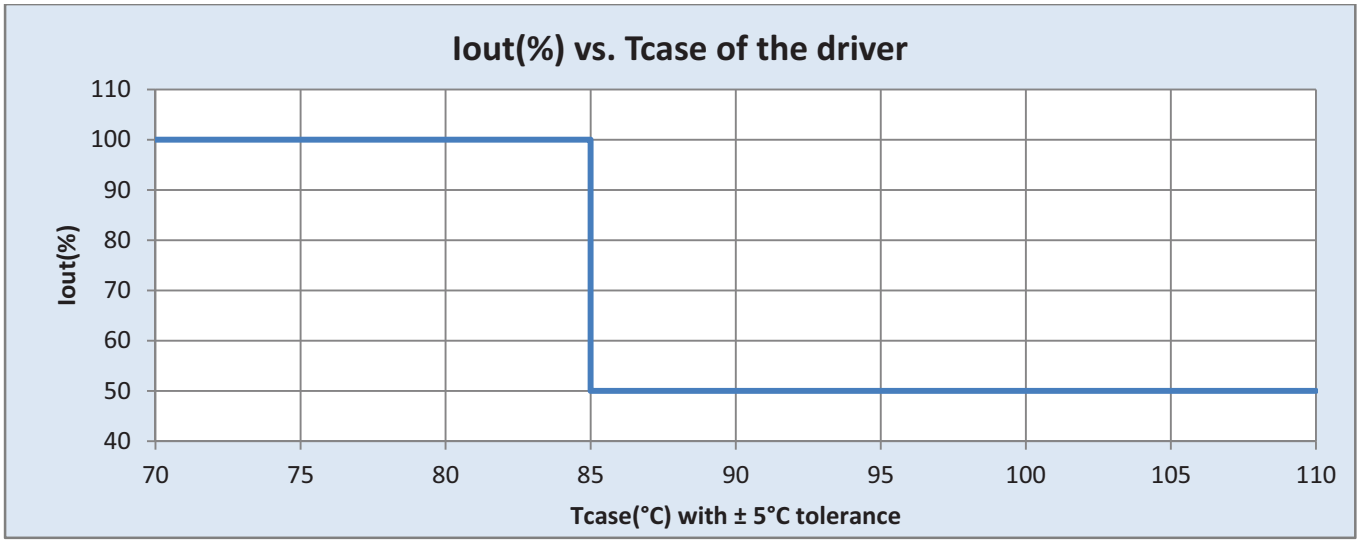
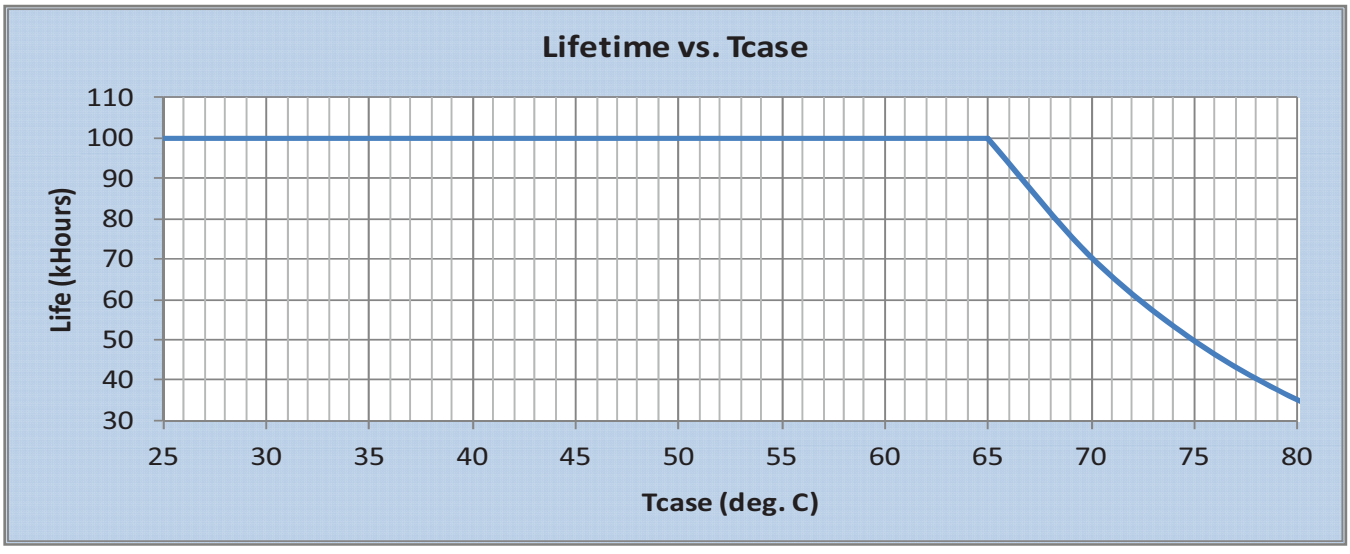
Iout vs. Tcase of Driver:



Lifetime vs. Tcase of Driver:



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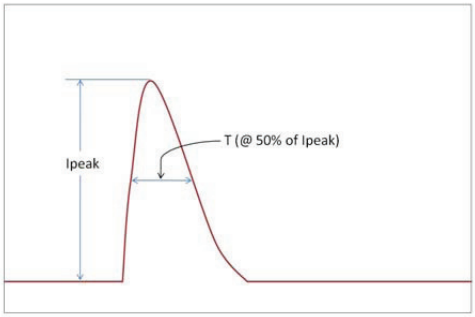
Failure Rate based upon field call rate data:

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

Inrush Current Info:



Vin	Ipeak	T (@ 50% of Ipeak)
120 Vrms	50 A	150 µs
277 Vrms	120 A	150 µs

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

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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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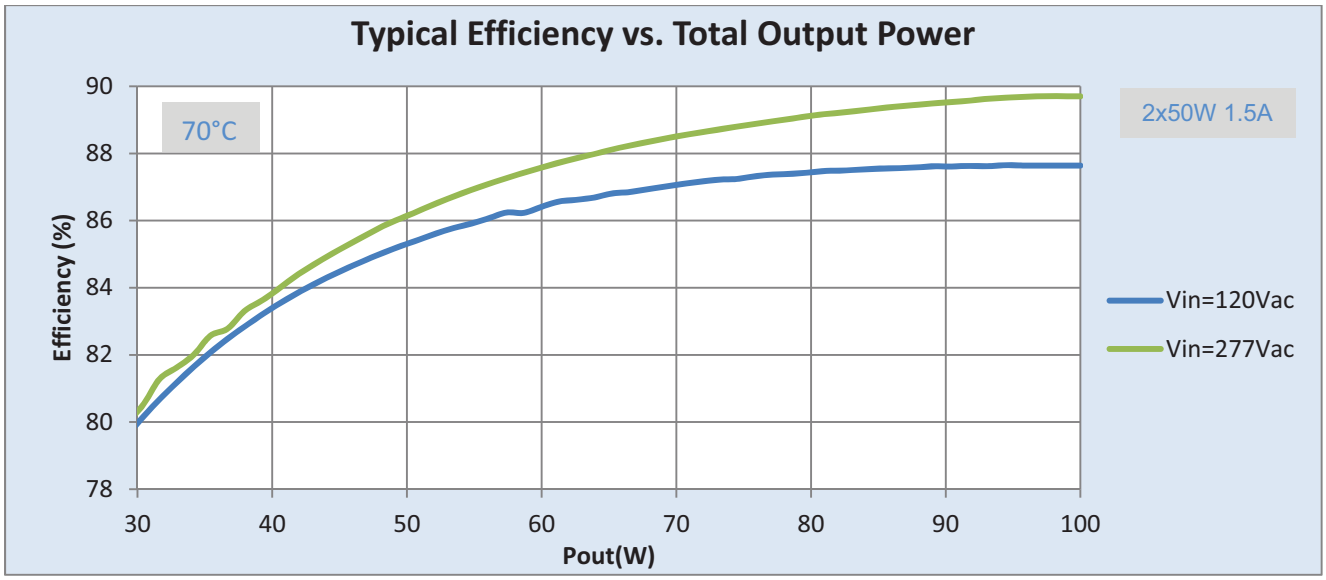

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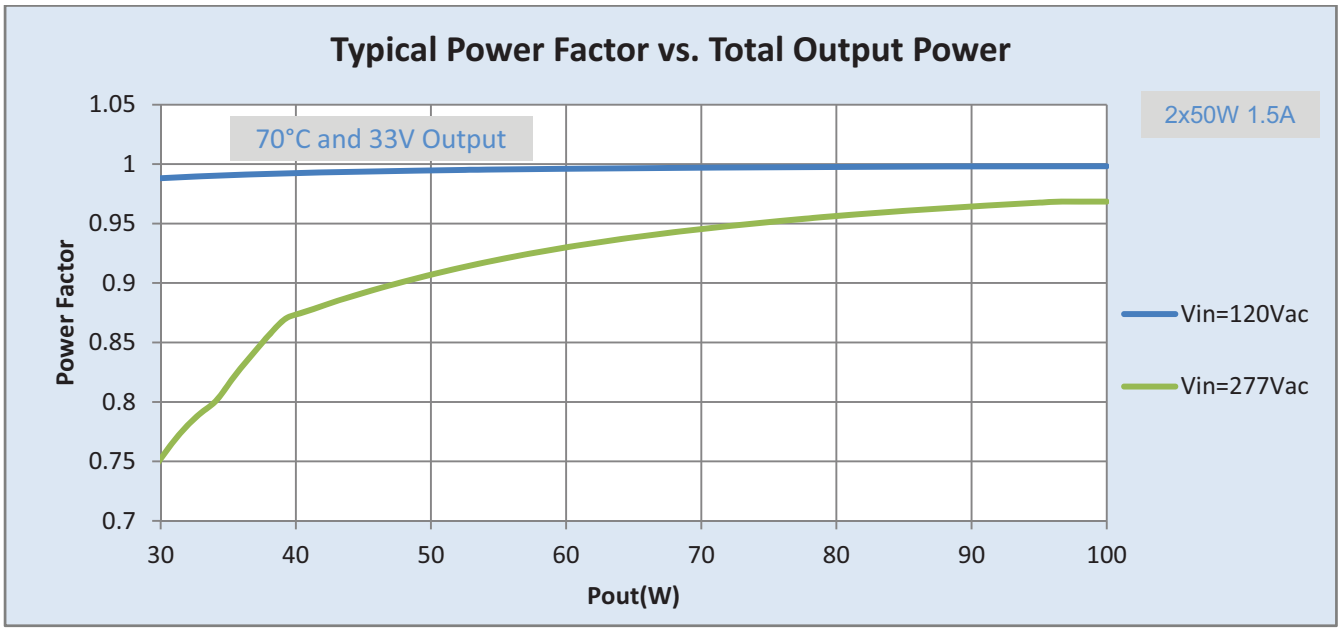

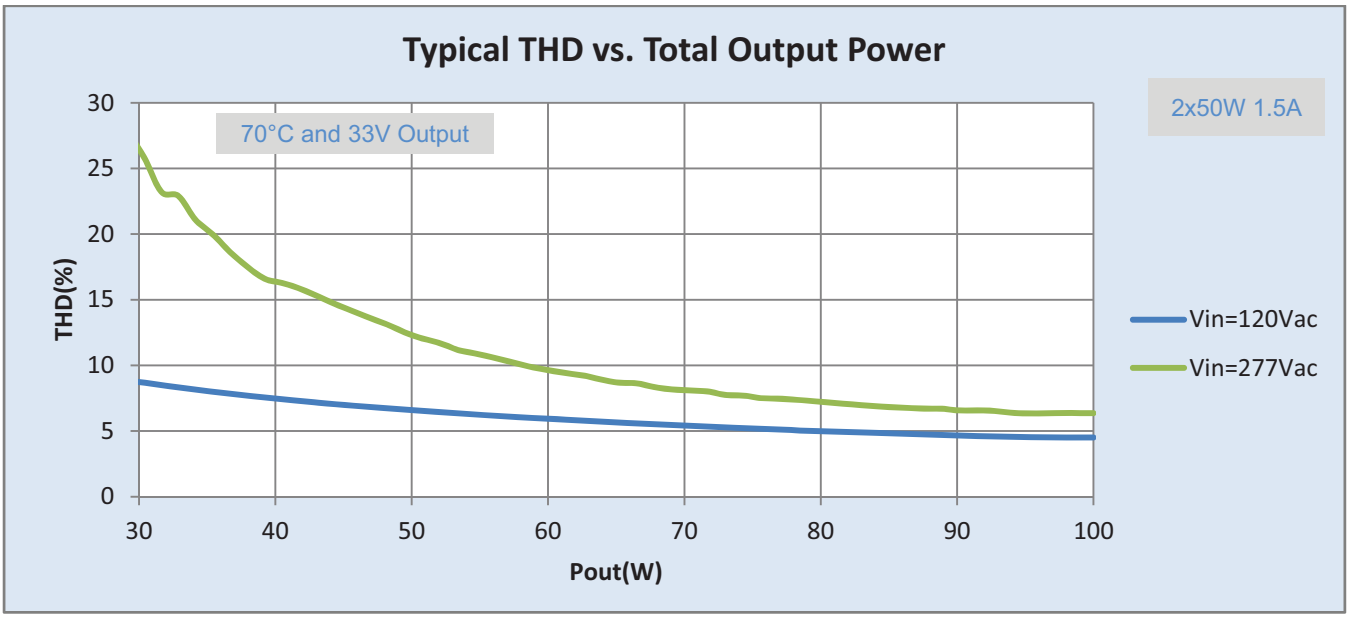

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Application Notes:

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RoHS	Yes
Status	Released

Isolation:

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

UL Conditions of Acceptability:

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