LED Driver

ADVANCE

by (Signify

Xitanium

XI040C105V042CNJ1



Specifications

Input Volt- age (Vac)	Out- put Power (W)	Output Volt- age Range (V)	Output Cur- rent (A)	Effi- ciency@ 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 Fac- tor @ Max Load	Surge Protec- tion Common/ Diff (KV)	Weight (Lbs/ kgs)	Envir. Protec- tion Rating	Driver Type
120		14 - 42 Class 2 Output 1.05 88 80°C 0.46 0.21		25 / 100	<8%		1.0/ UL damp	Constant						
277	77 44		88	80°C	0.21	56	65 / 100 <	<12%	>0.95	0.45	4/4		and dry	Current

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

Dimming	Dimming Range	Minimum Output Current (A)	Other Comments
0-10V Analog Class 2 Wiring	10% ~ 100%	0.105	Dimming source current: 150 µA

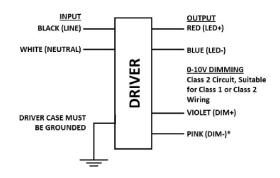
Warning

- Install in accordance with national and local electrical codes.
- The field-wiring leads or push-in terminals shall be fully enclosed.

Dimensions

in.	mm
5.47	138.9
1.81	46.0
1.11	28.2
5.67	144.0
1.08	27.4
5.93	148.25
	5.47 1.81 1.11 5.67 1.08

Wire Diagram



Product Data

Input and output use lead-wires.

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

Lead Length outside enclosure: 270 mm (±30mm) on all wires.



40W 1.05A 0-10V INT-J

Electrical Specifications

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

Ordering Information			
Order code	XI040C105V042CNJ1		
Full product code	XI040C105V042CNJ1M (Mid-Pack, 12pcs/Box)		
Full product name	XITANIUM 40W 1.05A 0-10V INT-J		
Input Information			
Line Voltage	120-277Vac_rms		
Line Current	0.46A @ 120V, 0.21A @ 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	14V to 42Vdc		
Maximum open circuit voltage	44V		
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)	80°C		
Features			
Interfaces	0-10V Dimming		
AOC (Adjustable Output Current)	N/A		
MTP (Module Temperature Protection)	N/A		
0-10V Dimming Specifications	150µA source current from driver, See dim curve for detail.		
Environment & Approbation			
Environmental Protection Rating	UL damp and dry		
Agency Approbations	UL8750, UL1310, UL935		
Electromagnetic Compliance	FCC Title 47 Part 15 Class A		
Isolation	Refer to table		
Audible noise	<24dB Class A		

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0-10V Dimming Curve:

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

LED Current Tolerance at $1050 \, \text{mA} \le 5\%$ over temperature and component variations and $\le 10\%$ at any dim level.

Minimum Dim Level: 10% of lout (minimum 105mA)

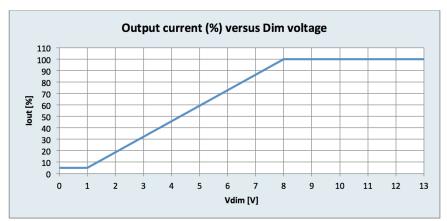
Maximum output voltage on the dimming wires: 13V

The dimming lead leakage current is 0.01mA. The maximum number of drivers that can be connected in parallel to one dimming control circuit is based on this dimming lead leakage current and the calculation is described in

the corresponding Design-in Guide.

Approved Dimmer List

Manufacturer	Manufacturer Part Number	
Lutron	Visit www.lutron.com/ advance for a list of dimmers (Mark VII) that will work with this driver	
Leviton	IllumaTech IP7 series	
Advance	Sunrise - SR1200ZTUNV	



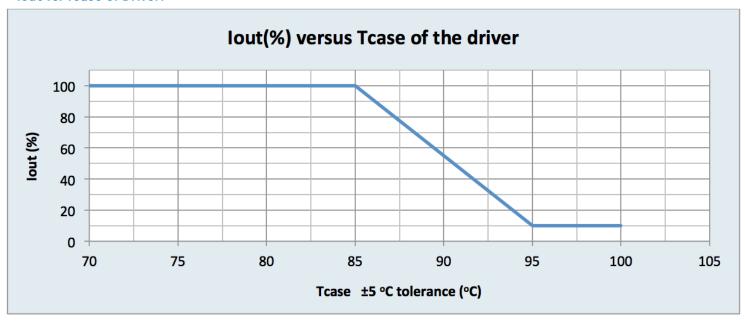
For compatibility with other dimmers please contact the dimmer manufacturer.

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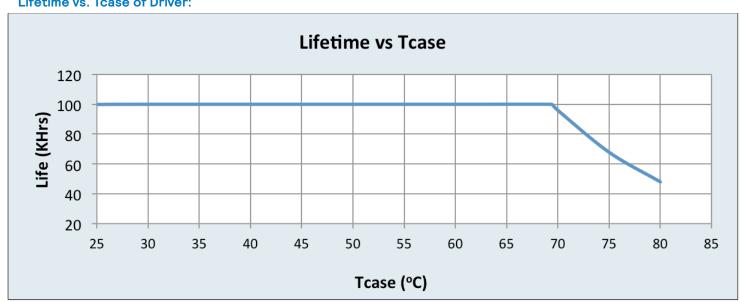
Electrical Specifications

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lout vs. Tcase of Driver:



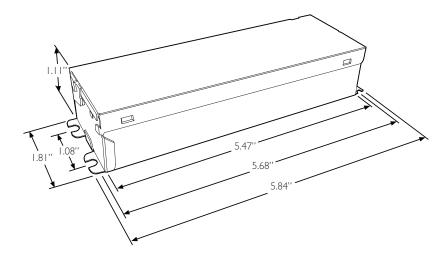
Lifetime vs. Tcase of Driver:



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Mechanical Specifications

Mechanical Drawing:

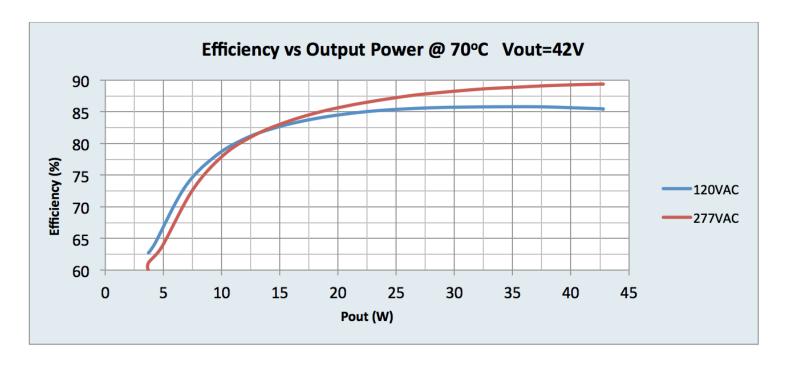


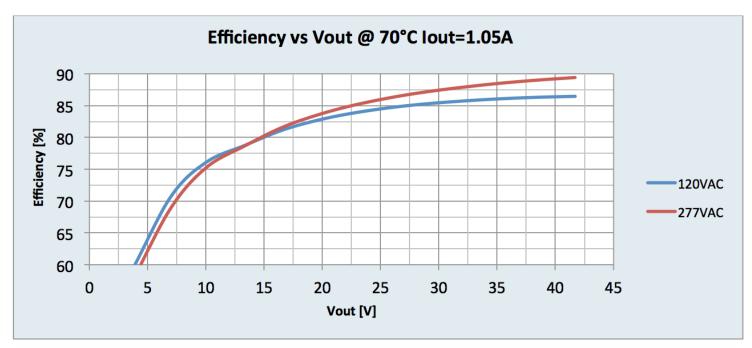
J-CAN

40W 1.05A 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.

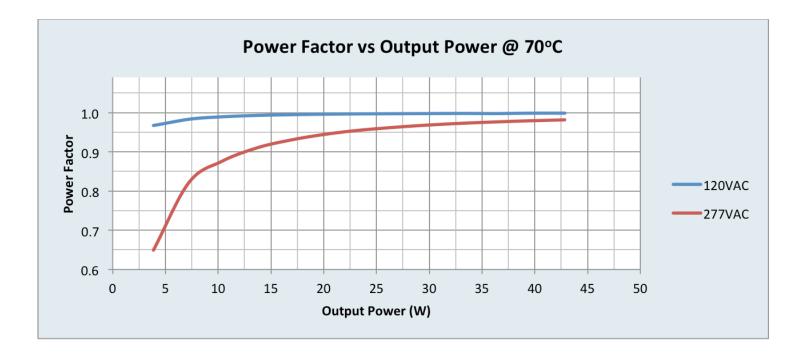


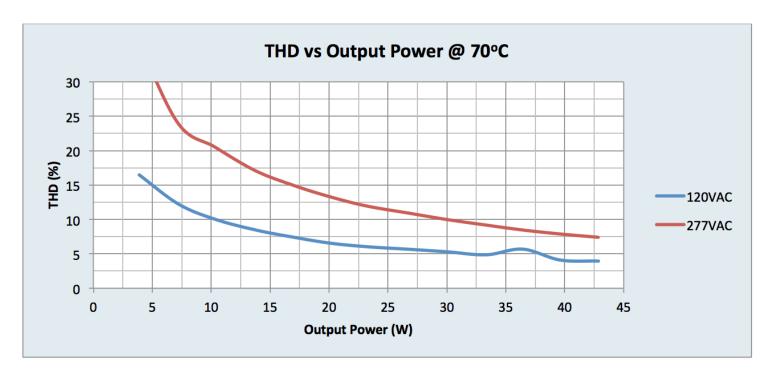


40W 1.05A 0-10V INT-J

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40W 1.05A 0-10V INT-J

Application Notes

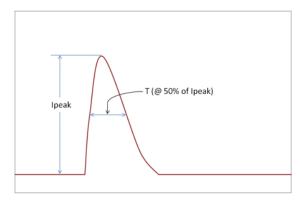
Isolation:

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).

Inrush Current Info:



Vin	lpeak	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

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