

# PHILIPS

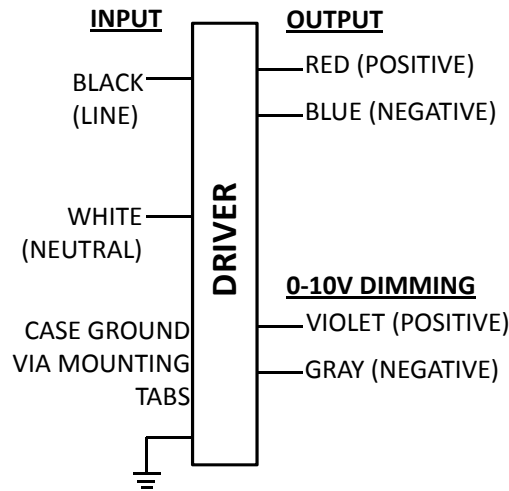
## Product Overview

### XR037C070V052DNE1M

Brand Name	XITANIUM
Description	Xitanium 37W 0.7A 120V 0-10V E-sXt
Input Voltage	120V
Input Freq.	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	37	26-52	0.7	88	80 °C	0.36	43	8 / 25	<10%	>0.95	3/3	0.88/ 0.4	UL damp and dry

#### Wire Diagram



#### Product Data:

Input and output use lead-wires.  
Lead-wires are 18AWG 105C/600V solid copper per UL1452.  
Lead Length outside enclosure: 195 mm (±51mm) on all wires

Dimming	Dimming Range	Minimum Output Current (A)	Other Comments
0-10V Analog Class 2 Wiring	15% ~ 100%	0.105	Dimming source current: 150 µA (±3%)

#### Enclosure



	in. (mm)
Case Length	5.0 (127)
Case Width	1.73 (44)
Case Height	1.18 (30)
Mounting Length	5.31 (135)
Mounting Width	1.02 (26)
Overall Length	5.51 (140)



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**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



## Electrical Specifications

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

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Order code	XR037C070V052DNE1M
Full product code	XR037C070V052DNE1M
Full product name	Xitanium 37W 0.7A 120V 0-10V E-sXt
Line Voltage	120Vac rms
Line Current	0.36A @ 120V
Line Frequency	60Hz
Min. Mains voltage operational	108 V [min]
Max. Mains voltage operational	132V [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 144Vac for a minimum of 2 hours @ Tcase<80C
Lightning Surge Protection	Per IEEE C62.41.2 2002 (3KV, 1.2/50 $\mu$ s.8/20 $\mu$ s Combination Wave with 2 Ohms source impedance, L-N, L-PE, N-PE)
Output voltage range	26V to 52Vdc
Maximum open circuit voltage	55.7V ( $\pm$ 5%)
Output Current Ripple (ripple = peak to peak / average)	70% @ Max Vout and Iout
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	150 $\mu$ A $\pm$ 3% source current from driver
Standby power	N/A
Environmental Protection Rating	UL damp and dry
Life @ Tcase 70C	refer to graph below
Life @ Tcase 80C	refer to graph below
Agency Approbations	UL8750, UL1310, UL935, CSA C22.2 No. 250.13-12, CSA 22.2 No.223
Electromagnetic Compliance	FCC Title 47 Part 15 Class A
Isolation	Refer to table

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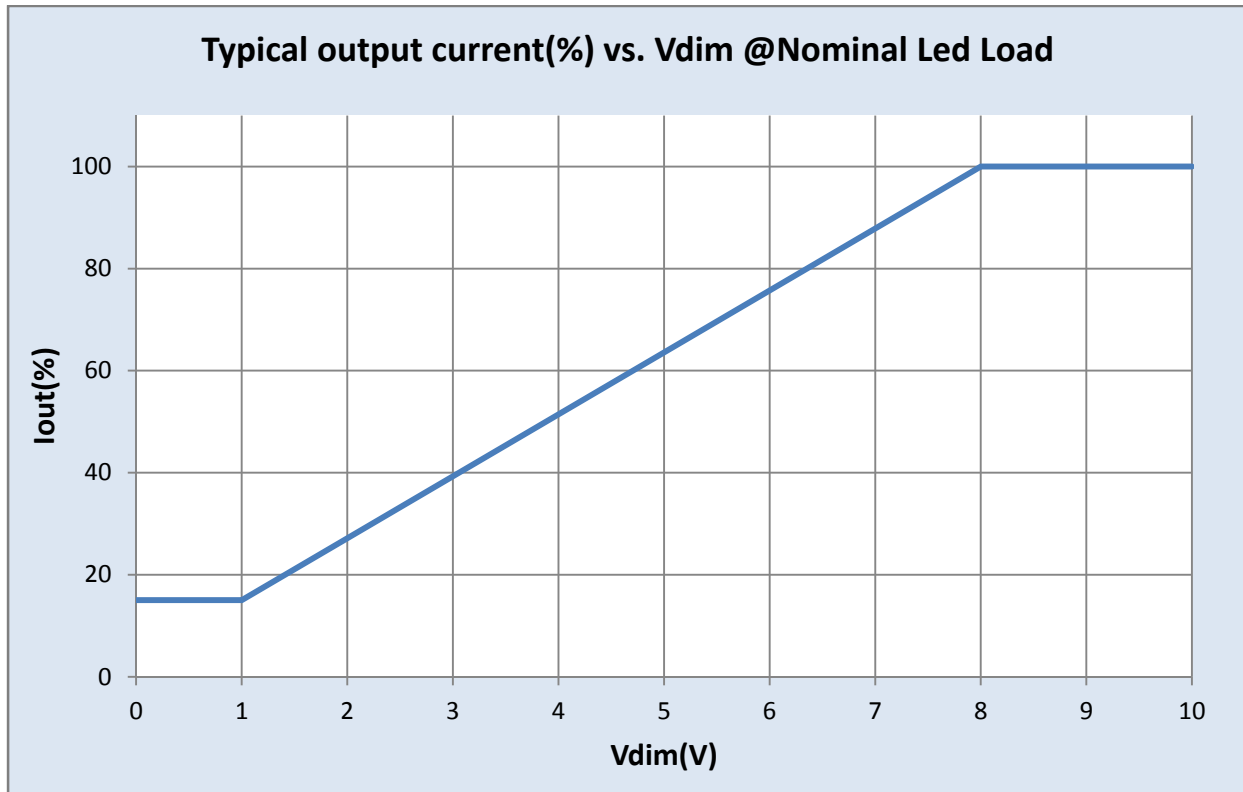
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### 0-10V Dimming Curve:

Dimming source current from the driver: 150µA (±3%) (@ 0<Vdim<8V)

LED Current Tolerance at 700mA ≤ 5% over temperature and component variations and ≤ 10% at any dim level.

Minimum Dim Level: 15% of Iout (minimum 105mA)



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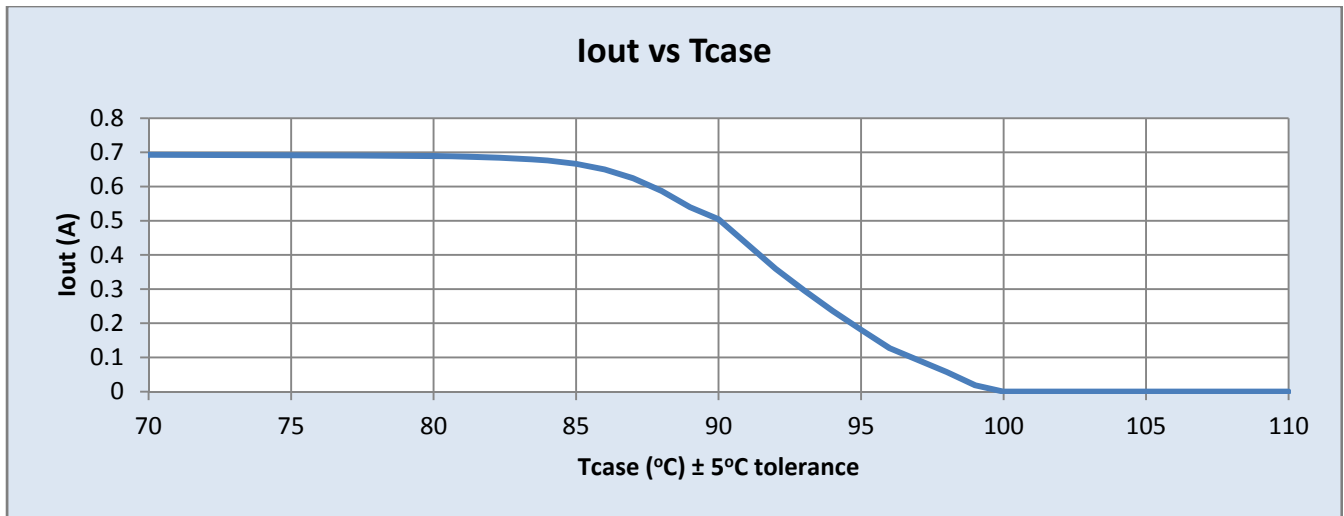


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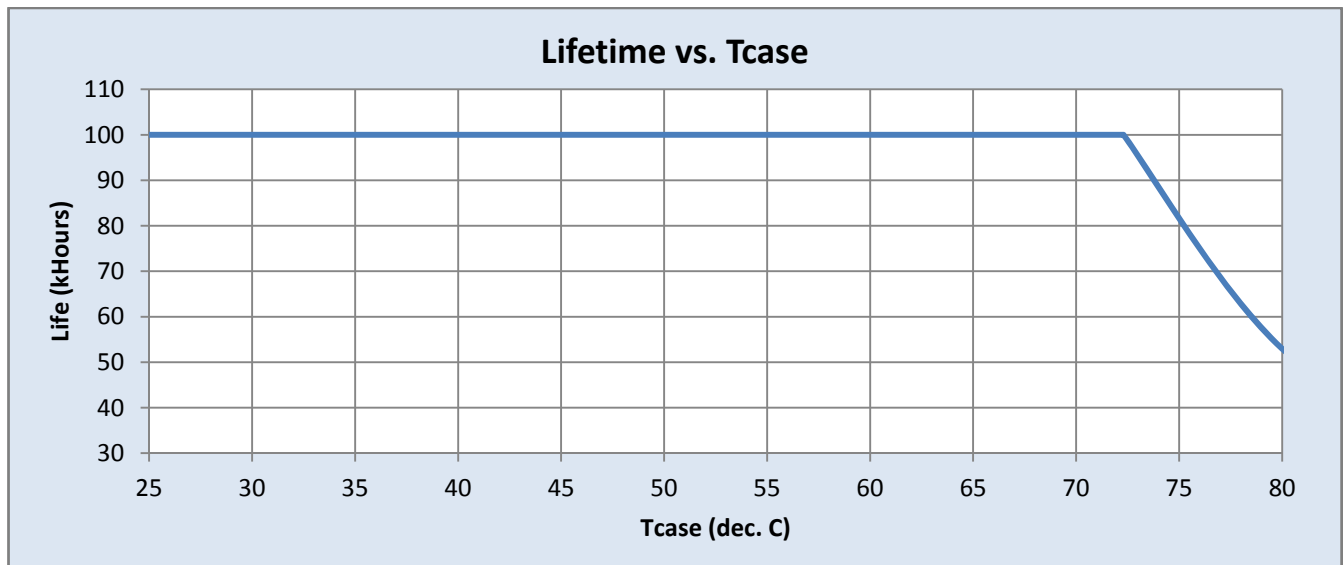
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### Iout vs. Tcase of Driver:



### Lifetime vs. Tcase of Driver:



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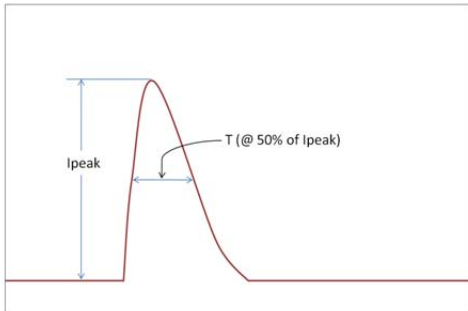
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Failure Rate based upon field call rate data:

- <0.01% per 1 kHr @<= Tcase 70 C

## Inrush Current Info:



<b>Vin</b>	<b>Ipeak</b>	<b>T (@ 50% of Ipeak)</b>
<b>120 Vrms</b>	<b>8A</b>	<b>25 μs</b>

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

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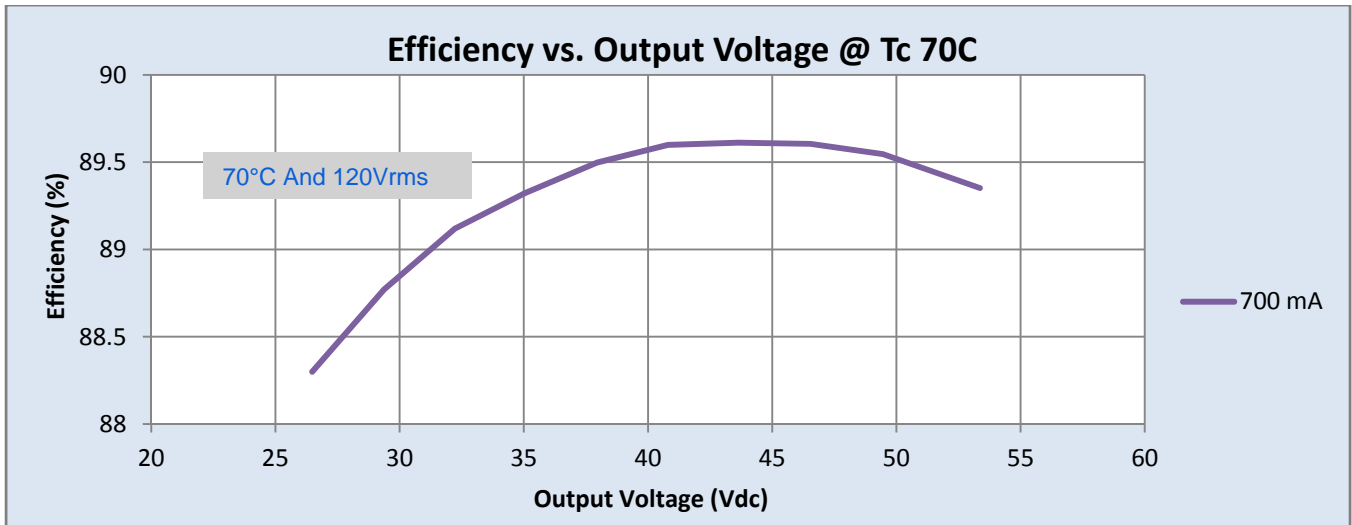
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## Performance Characteristics

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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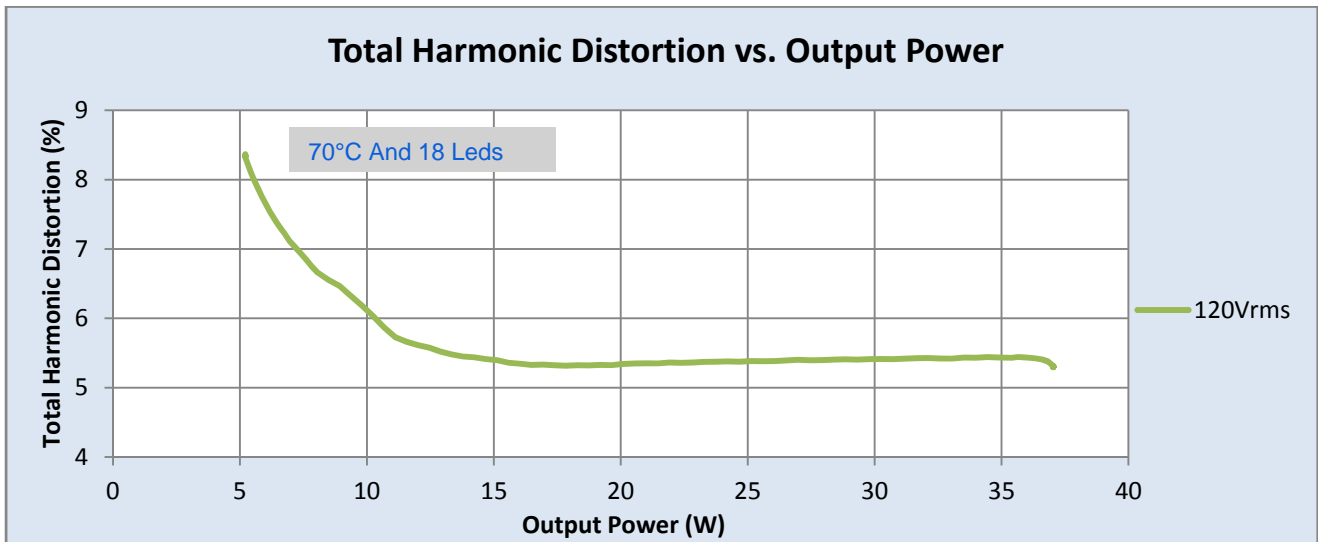
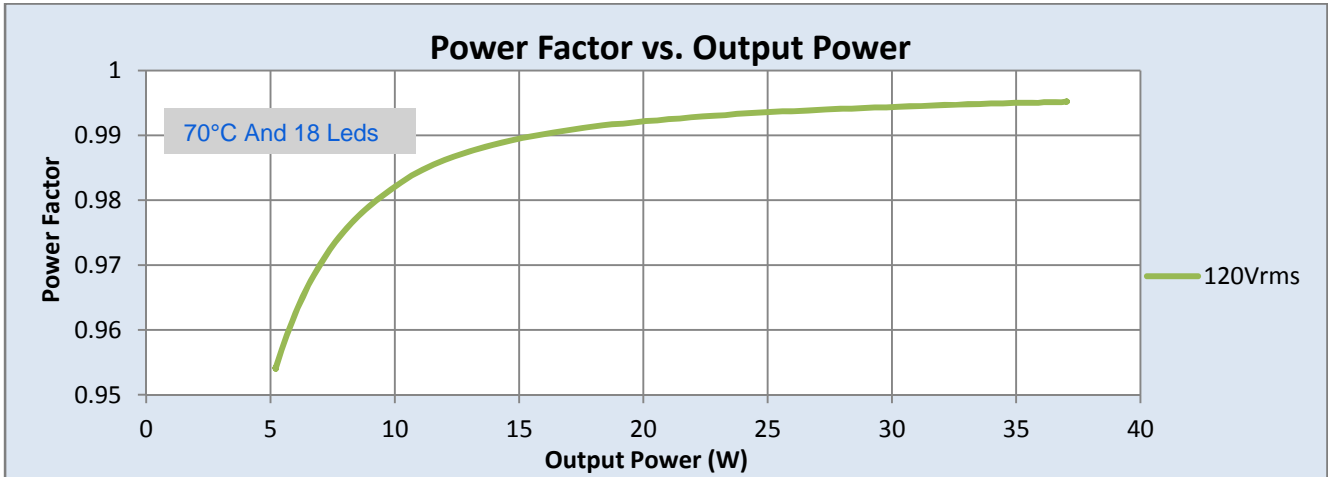
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Application Notes:

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Isolation:

Isolation	Input Wires	Output Wires	0-10V Wires	Chassis
Input Wires	NA	2xU+1KV	2xU+1KV	2xU+1KV
Output Wires	2xU+1KV	NA	NA	500Vac
0-10V Wires	2xU+1KV	NA	NA	500Vac
Chassis	2xU+1KV	500Vac	500Vac	NA

UL Conditions of Acceptability:

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

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