

PHILIPS

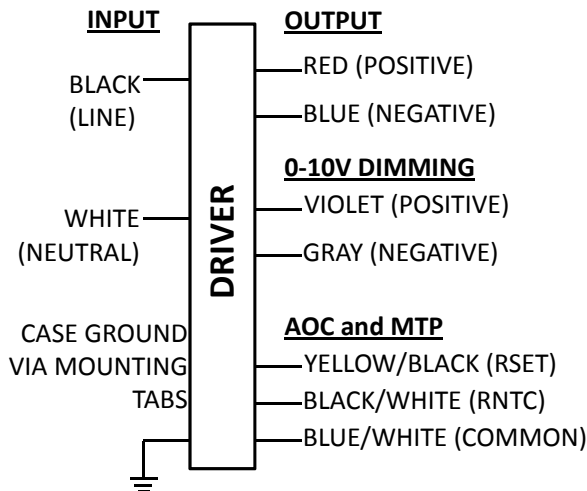
Product Overview

XI075C053VI40DNYIM

Brand Name	XITANIUM
Description	Xitanium 75W 0.1-0.53A AOCM 0-10V 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	75	71 - 143	0.10 – 0.53	90.5	80 °C	0.69	85	41 / 100	<10%	>0.95	4/4	1.53/ 0.7	UL damp and dry
277				92		0.29		90 / 100	<15%	>0.9			

Wire Diagram



Product Data:

Input and output use lead- wires.
Lead-wires are 18AWG 105C/600V solid copper per UL1452.
Lead Length outside enclosure: 270 mm (±30mm) on all wires

AOC: Adjustable Output Current
MTP: Module Temperature Protection

Dimming	Dimming Range	Minimum Output Current (A)	Other Comments
0-10V Analog Class 1 or 2 Wiring Shutdown= Yes (see specification)	10% ~ 100%	0.035	Dimming source current: 150 µA (±3%)

Enclosure



	in. (mm)
Case Length	5.52 (138)
Case Width	2.35 (59.1)
Case Height	1.52 (38)
Mounting Length	6.12 (153)
Mounting Width	1.7 (42.9)
Overall Length	6.72 (168)



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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.

XI075C053V140DNY1M

Brand Name	XITANIUM
Description	Xitanium 75W 0.1-0.53A AOCCM 0-10V sXt
Input Voltage	120 ~ 277V
Input Freq.	50/60Hz
RoHS	Yes
Status	Released

Order code	XI075C053V140DNY1M
Full product code	XI075C053V140DNY1M
Full product name	XITANIUM 75W 0.53A AOCCM INT-Y SXT
Line Voltage	120-277Vac rms
Line Current	0.69A @ 120V, 0.29A @ 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 μ s.8/20 μ s Combination Wave with 2 Ohms source impedance, L-N, L-PE, N-PE)
Output voltage range	71V to 143Vdc
Maximum open circuit voltage	146.5V ($\pm$ 5%)
Output Current Ripple (ripple = peak to peak / average)	30% max @ max Iout and max Vout Low frequency ($\leq$ 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, MTP
AOC (Adjustable Output Current)	100mA to 530mA via external resistor (Refer to specifications below)
MTP (Module Temperature Protection)	Current cutback to 10% (Refer to specifications below)
0-10V Dimming Specifications	150 μ A $\pm$ 3% source current from driver, Vdim > 14.5V to shutdown driver. See dim curve for detail.
Standby power	< 0.4W
Environmental Protection Rating	UL damp and dry
Life @ Tcase 70C	refer to graph below
Life @ Tcase 80C	refer to graph below
Agency Approbations	UL879, UL1012, UL935, (cRUs/CSA)
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: 150 μ A ($\pm$ 3%) (@ 0<Vdim<8V)

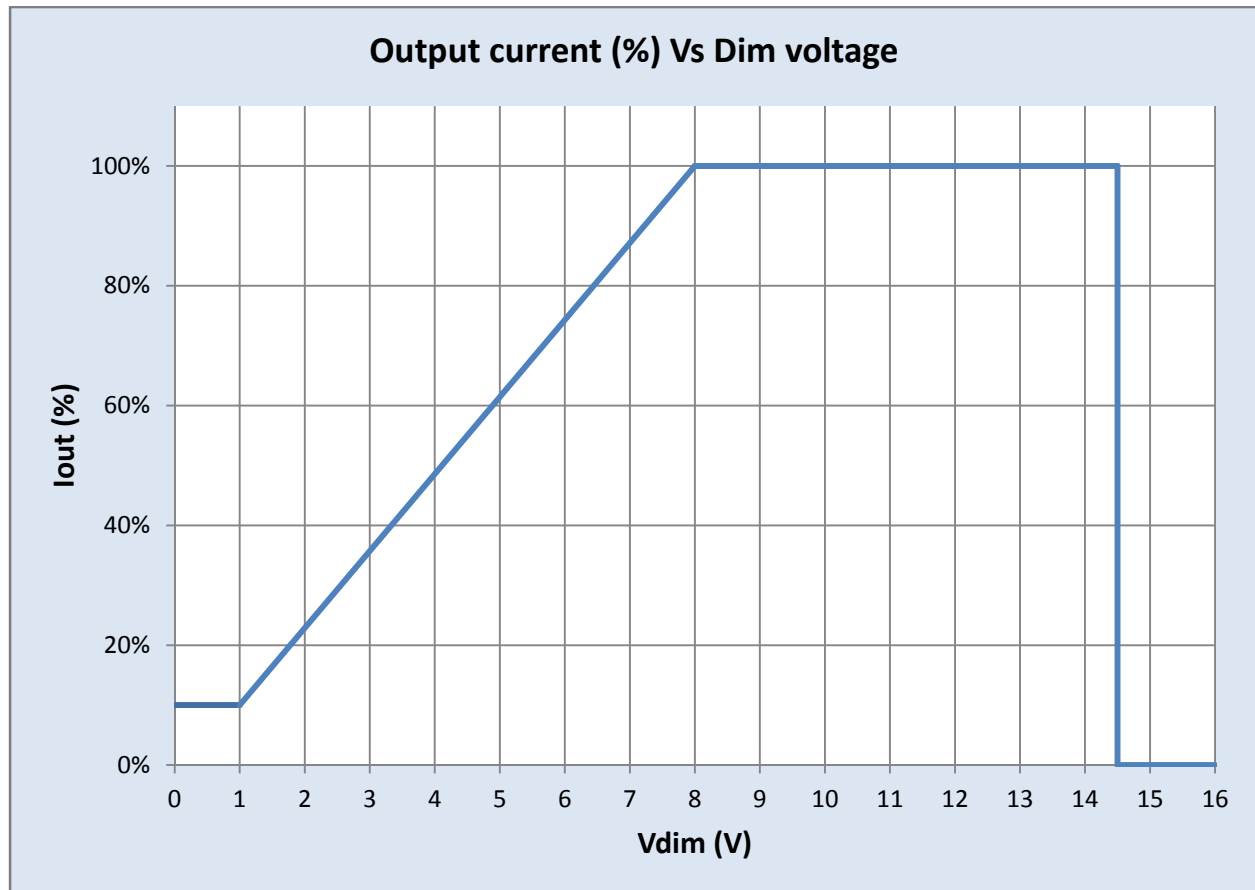
LED Current Tolerance at 530mA $\leq$ 5% over temperature and component variations and $\leq$ 10% at any dim level.

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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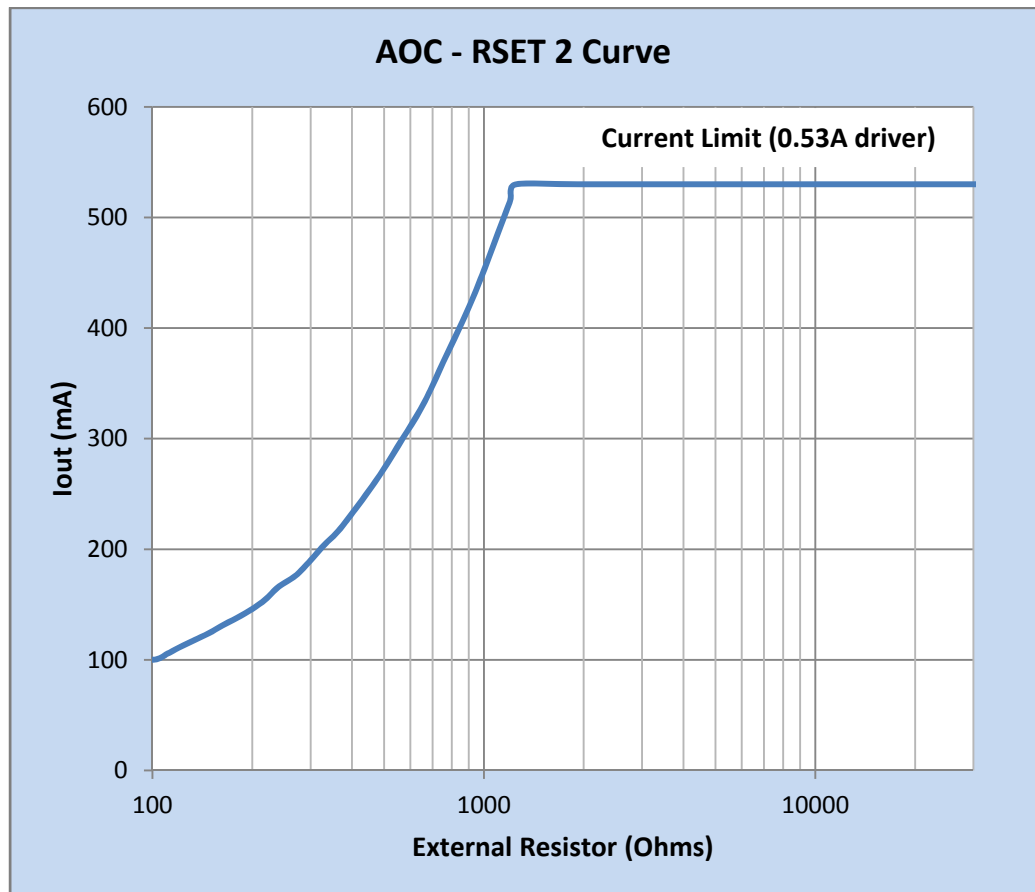
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Input Freq.	50/60Hz
RoHS	Yes
Status	Released

AOC (Adjustable Output Current) Settings:

LED Current Tolerance over temperature and component variations for AOC ≤ 10% at any dim level.

Rset(Ohms)	Current (mA)
0	100
100	100
110	105
120	111
130	116
150	125
160	130
180	138
200	146
220	155
240	166
270	176
300	190
330	204
360	215
390	228
430	245
470	261
510	277
560	297
620	318
680	340
750	368
820	392
910	422
1000	452
1100	485
1200	515
>1300	530



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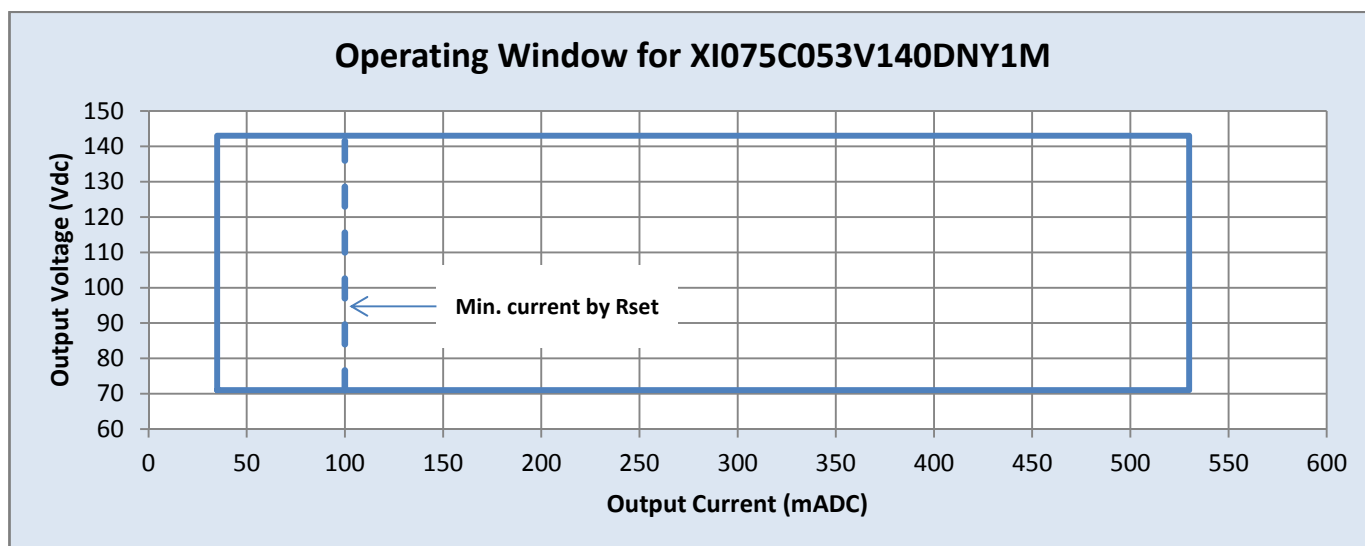
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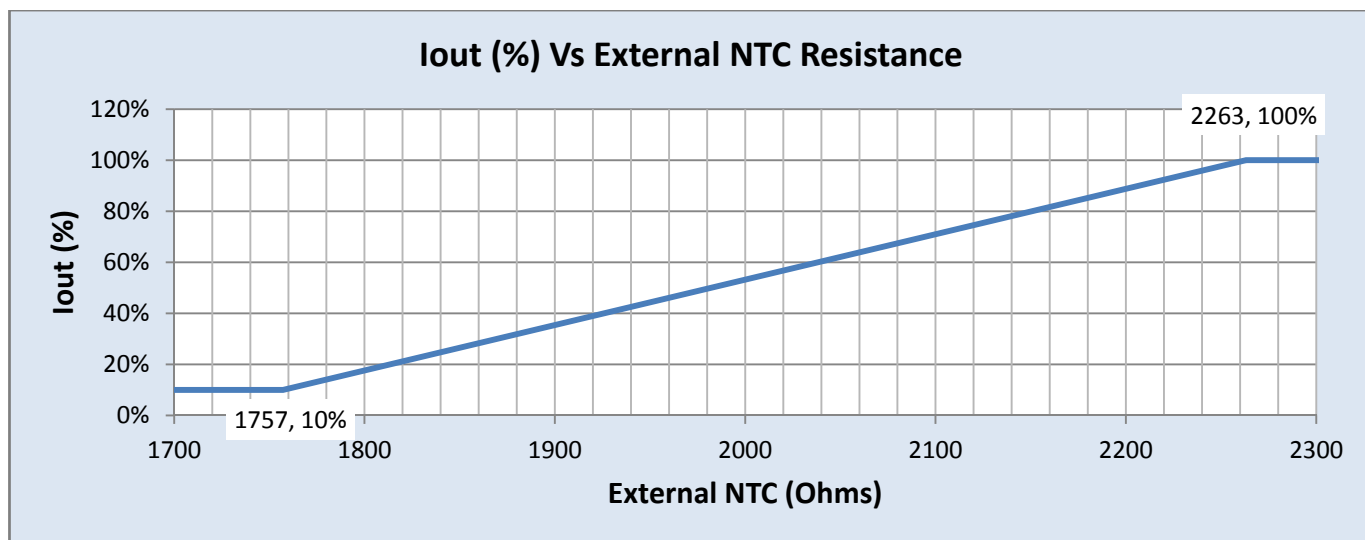
XI075C053V140DNY1M

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Input Voltage	120 ~ 277V
Input Freq.	50/60Hz
RoHS	Yes
Status	Released

Operating Window:



Module Temperature Protection:



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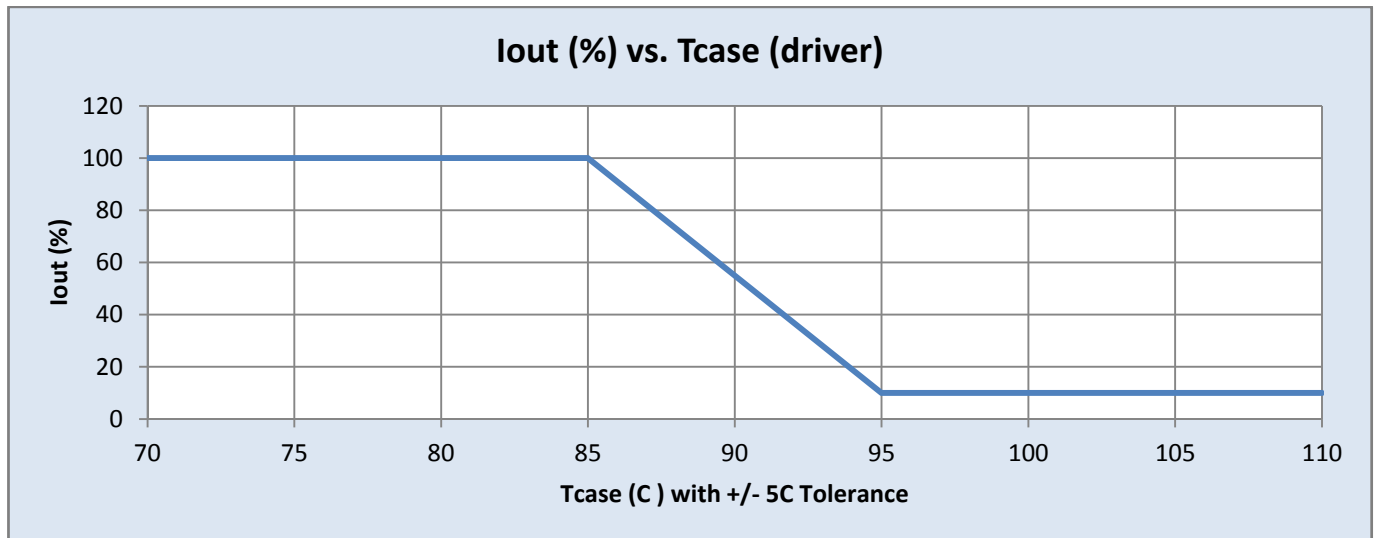


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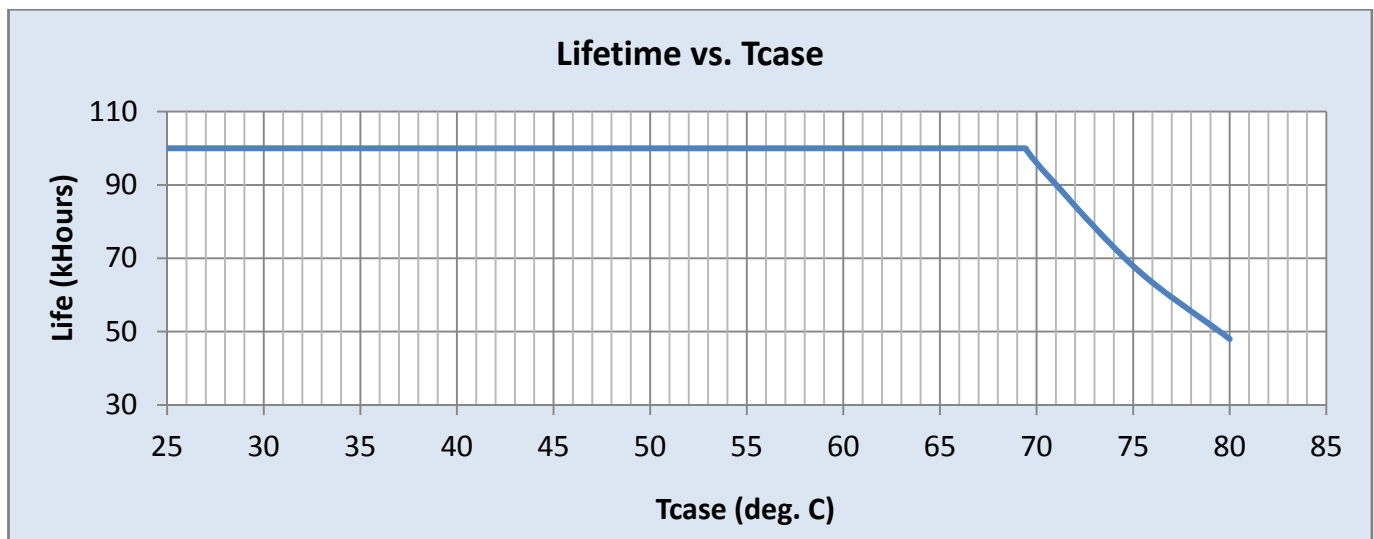
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RoHS	Yes
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Iout vs. Tcase of Driver:



Lifetime vs. Tcase of Driver:



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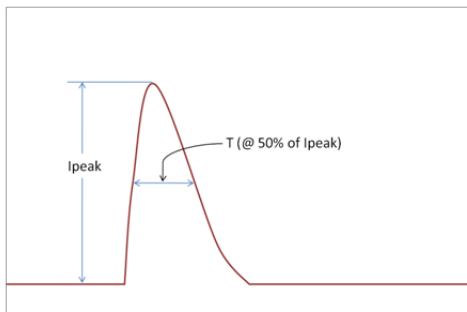
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Input Voltage	120 ~ 277V
Input Freq.	50/60Hz
RoHS	Yes
Status	Released

Failure Rate based upon field call rate data:

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

Inrush Current Info:



Vin	Ipeak	T (@ 50% of Ipeak)
120 Vrms	41 A	100 μs
277 Vrms	90 A	100 μs

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

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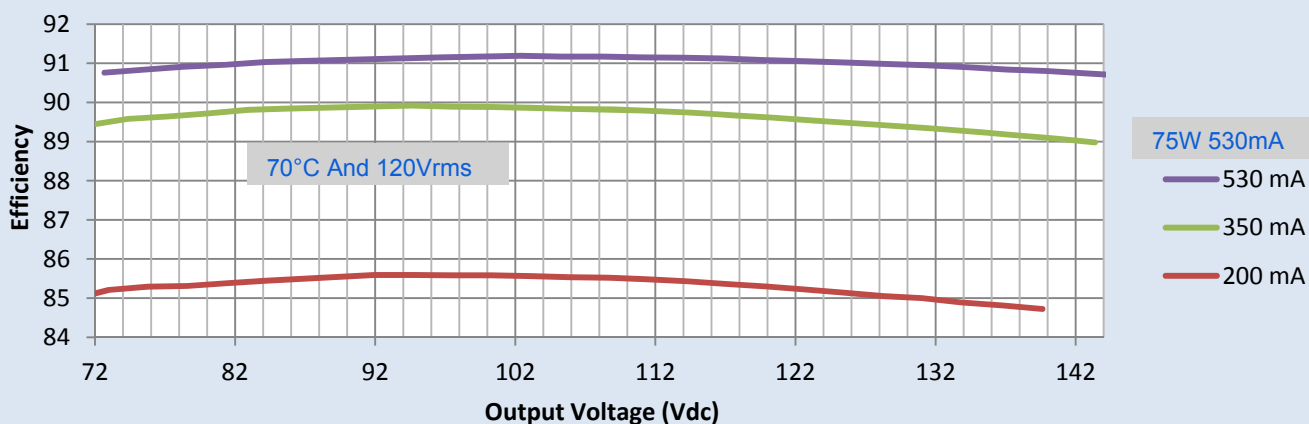
Performance Characteristics

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.

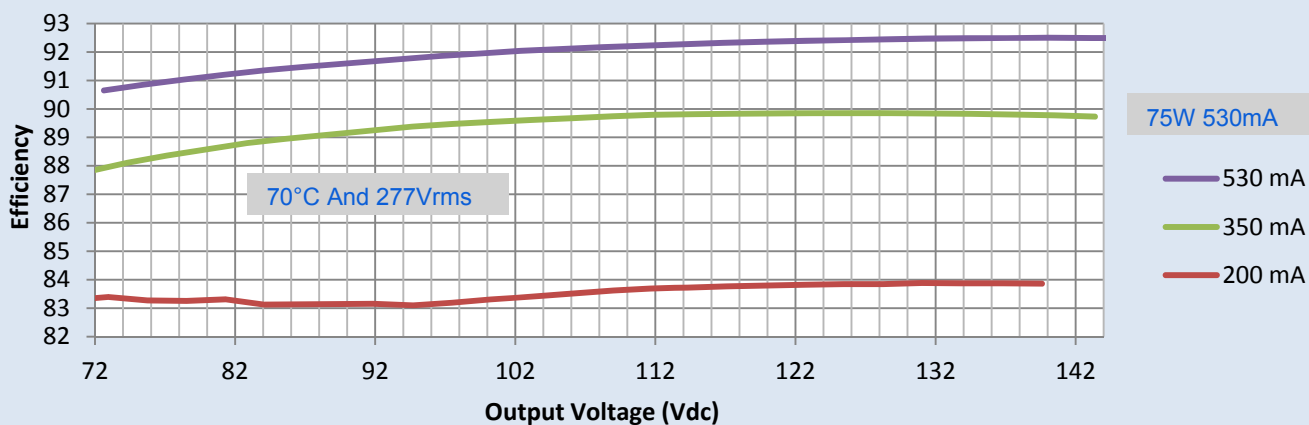
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Efficiency Vs. Output Voltage



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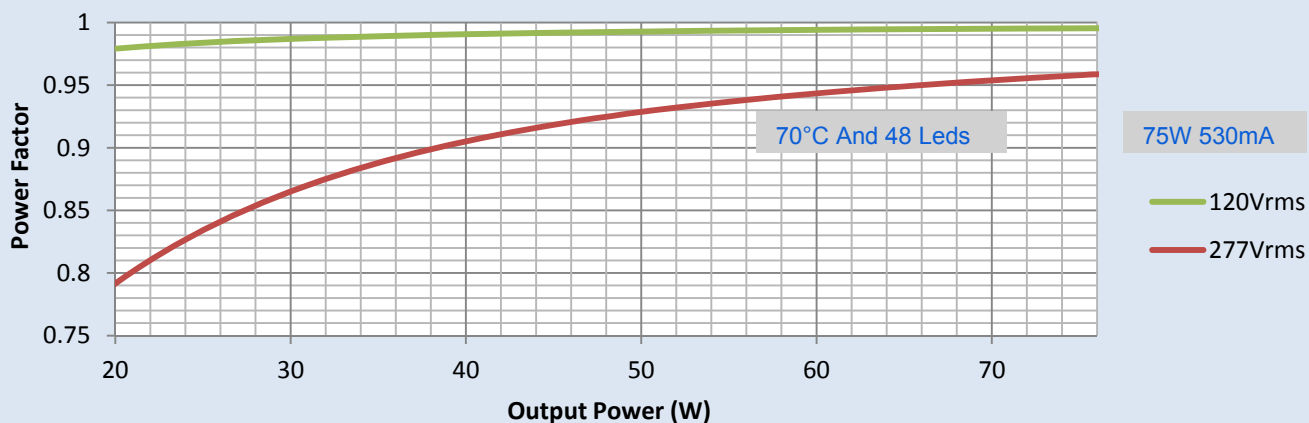
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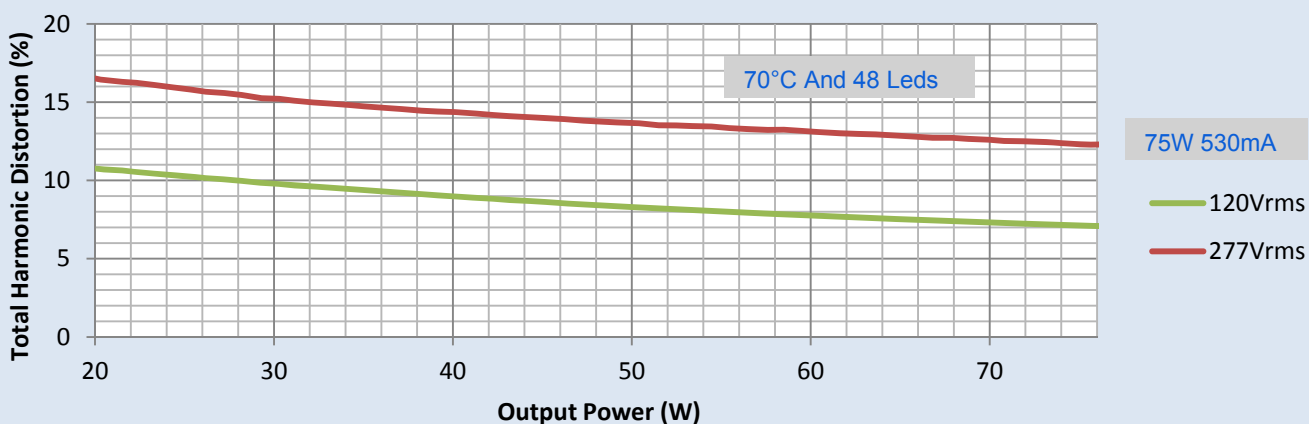
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Power Factor Vs. Output Power



Total Harmonic Distortion Vs. Output Power



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Application Notes:

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RoHS	Yes
Status	Released

Isolation:

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

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