

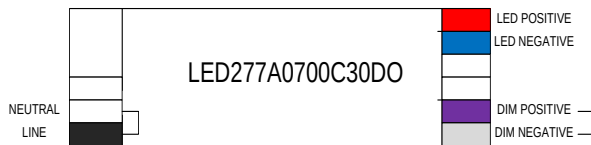
LED277A0700C30DO

Electrical Specifications

Brand Name	XITANIUM
Description	Xitanium 21W 0.7A 0-10V 277V
Input Voltage	277
Input Frequency	60Hz
RoHS	Yes
Status	Active

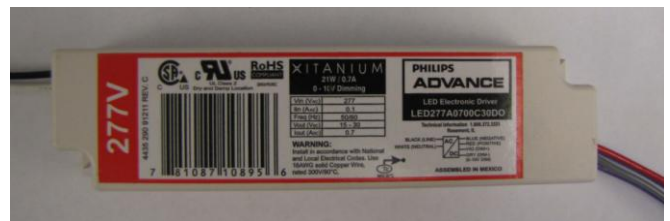
Output Power (W)	Output Voltage (V)	Output Current (A dc)	Typical Efficiency@ Max Load	Max Case Temp (°C)	Input Current (A rms)	Max. Input Power (W)	Typ Inrush Current (A _{pk} /50%-μs)	THD @ Max Load (%)	Power Factor @ Max Load	Surge Protection Diff (KV)/Ring wave 100KHz(KV)	Typ Weight (Lbs/kgs)	Envir. Protection Rating
21	15~30	0.7	277Vac	80 °C	277Vac	26	4.5/35us	<20%	>0.9	3/6	.88/ 0.4	UL Dry & Damp
			86%		0.1							

Wire Diagram



Dimming Method	Dimming Range	Min Output Current (A dc)	Other Comments
0-10V Non-Isolated	15% - 100%	0.105	Dimming source current: 150 μA

Enclosure



	in. (mm)
Case Length	5.2(132)
Case Width	1.35 (34.2)
Case Height	0.98 (25)

Revised 02/07/2012

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Product Data	
Full product code	LED277A0700C30DO
Full product name	Xitanium 21W 0.7A 0-10V 277V
Net weight per piece	0.4KG / 0.88 lbs
Interfaces	0-10V Dimming(Non-Isolated)
Ambient Temp Range	-40 C to +55 C
Line Voltage	277V
Line Current	0.1A rms Max
Line Frequency	47-75Hz
Life @ 70C	>50kHrs
Max TC	80C
Inrush current pulse peak/width	4.5Apk/35μs
LED Current Tolerance	+/-5% of Max current level @25C
Earth leakage current	0.5 mA rms [max]
Mains voltage safety (AC)	+/-10%
Mains voltage performance (AC)	+/-10%
Minimum mains voltage operational	249V [min]
Maximum mains voltage operational	305V [max]
Output Current ripple	Typ: 30% @ 700mA (ripple = pk-avg/avg)
THD total @max load	< 20% (@full load and over entire input voltage range)
PF @ Max Load	>0.9
Protections	Short Circuit and Open Circuit Protection for LED + and LED-
Terminal Wires	Input: 7.5"(±1.5") 18AWG solid wire, Black (hot), White (neutral) Output: 7.5"(±1.5") 18AWG solid wire, Red (positive), Blue (negative) Dimming: 8.5"(±1.5") 18AWG solid wire, Violet (Dim+) ,Grey (Dim-)

Installation & Application Notes:

Section I – Physical Characteristics

- 1.1 LED Driver shall be installed inside an electrical enclosure
- 1.2 Wiring inside electrical enclosure shall comply with 600V/105°C rating or higher.

Section II – Performance

- 2.1 LED Driver has a rated lifetime of 50,000 hours @ TC ≤70C.
- 2.2 LED Driver tolerates sustained open circuit and short circuit output conditions without damage.
- 2.3 LED Driver maximum allowable case temperature is 80°C – see product label for measurement location.
- 2.4 LED Driver reduces output power to LEDs if its case temperature exceeds >80°C –thermal protection and eventually reduces output current to minimum current of the driver.

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Section III – UL Conditions of Acceptability

UL file number E220165 Vol1 Section 11. Main UL Standards used for Evaluation: UL8750, UL1310 and UL879.

When installed in the end product, consideration shall be given to the following:

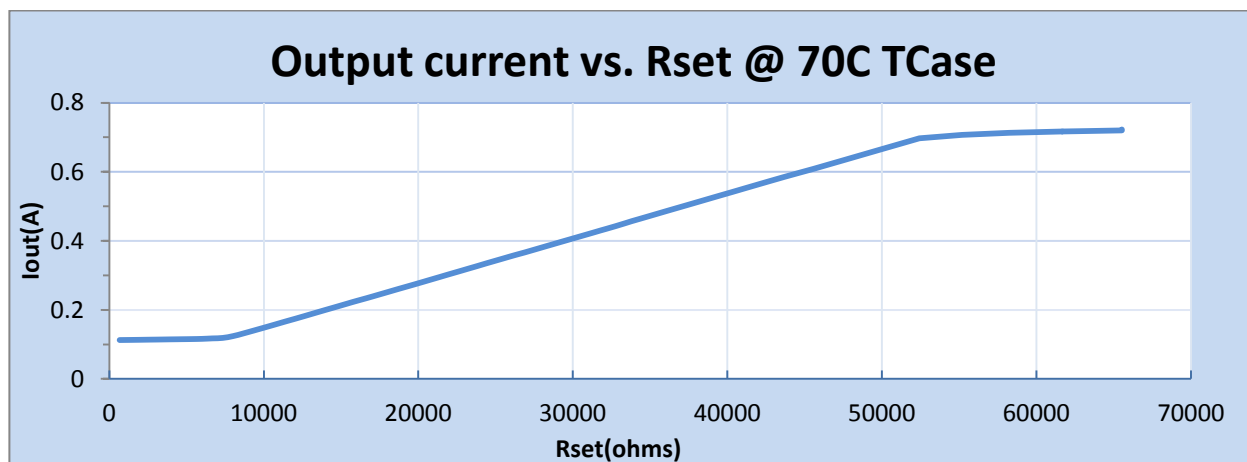
- 3.1 This component has been judged on the basis of the required spacing's in the Standard for Electric Sign Component, UL 879, and Eighth Edition, which would cover the component itself if submitted for Listing.
- 3.2 The maximum available output electrical parameters of the driver met the Class 2 – Inherently Limited specified in UL 1310.
- 3.3 The unit is intended for installation inside an electrical enclosure.
- 3.4 The maximum available output current and power parameters of the driver met the limitation for Class 2 Inherently limited in accordance with the Canadian Standard CSA C22.2 No. 223.
- 3.5 The primary and secondary terminal blocks are R/C (XCFR2/XCFR8) suitable for field wiring.
- 3.6 The Driver has been evaluated for use in "Dry" and "Damp" locations.
- 3.7 When the driver is installed in the end-use application, the manufacturer has specified the measured case temperature at the (Tc) location specified on the marking label must not exceed 80°C.
- 3.8 The equipment shall be installed in compliance with the enclosure, mounting, spacing, casualty and segregation requirements of the end-product application.
- 3.9 The maximum measured leakage current using leakage current tester by Simpson Model 228 was 0.32 mA rms at 277V input.
- 3.10 The 0-10V dimming circuit has been evaluated as a Class 2 output.
- 3.11 The secondary output of all models and the 10V DC dimmer circuit of the Model LED277A0700C30DO are considered to be Class 2 circuits.

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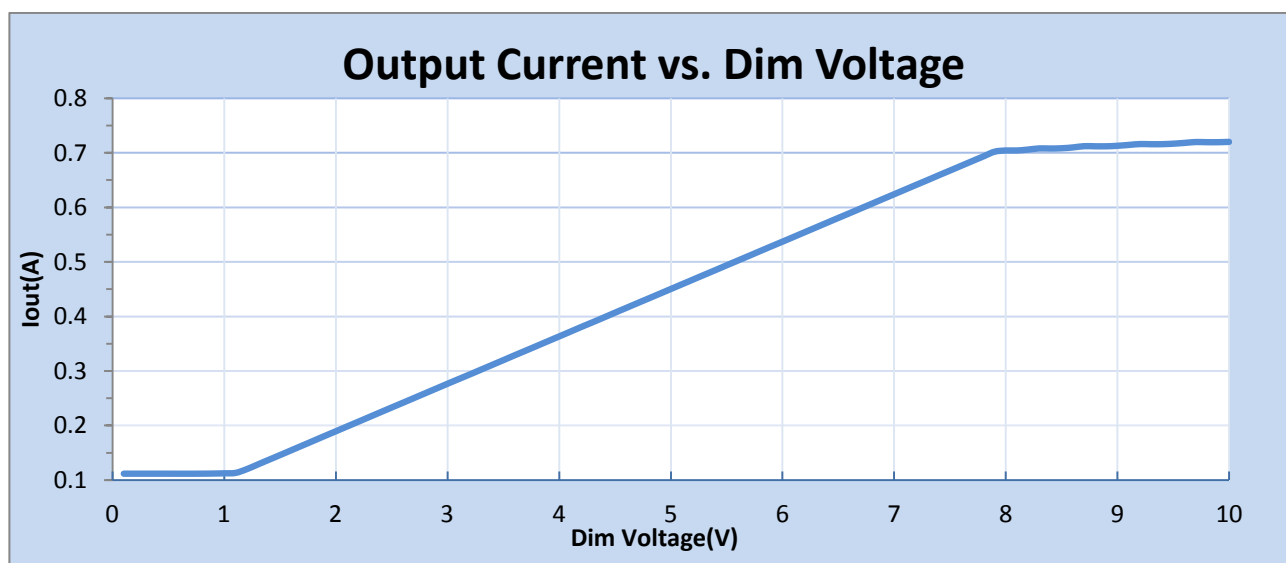
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Measured by placing a resistor between the DIM positive and DIM negative (as shown in wire diagram above) instead of a Mark VII Dimmer



Dim Voltage

Measured by placing a DC voltage instead of a Mark VII dimmer between the DIM positive and DIM negative



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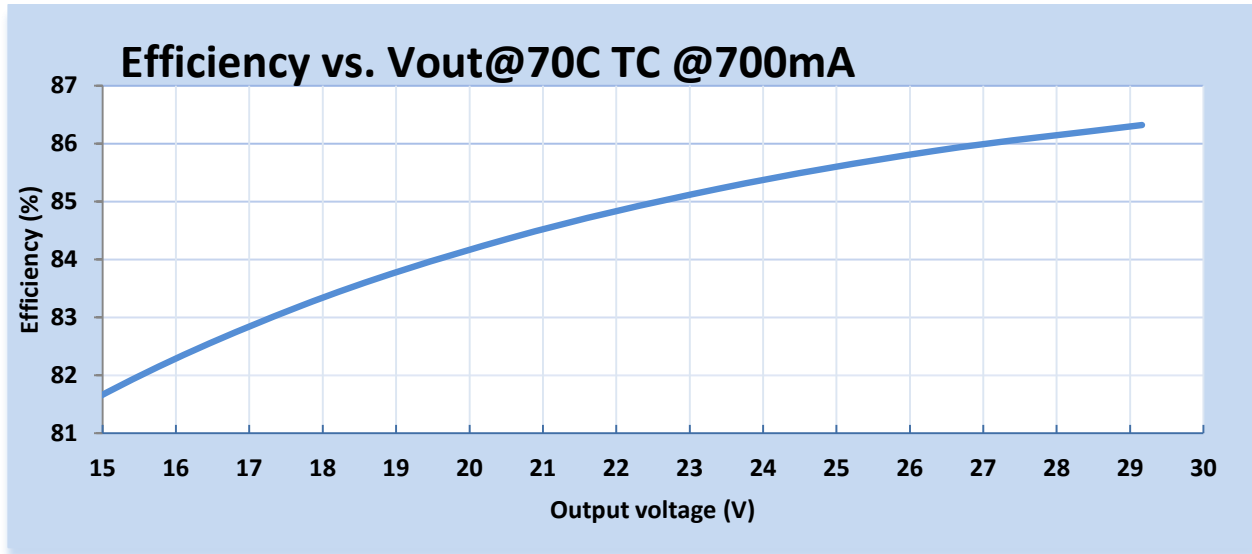
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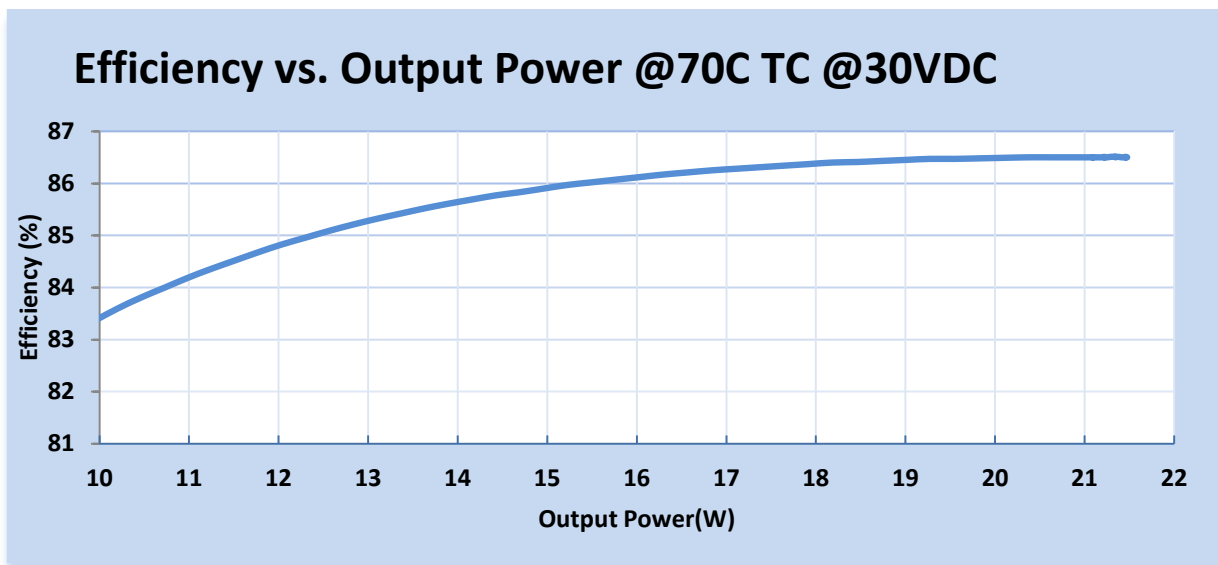
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For the plots below, output power is varied by changing the dim voltage from 1-10V keeping the load constant at 10 LED's



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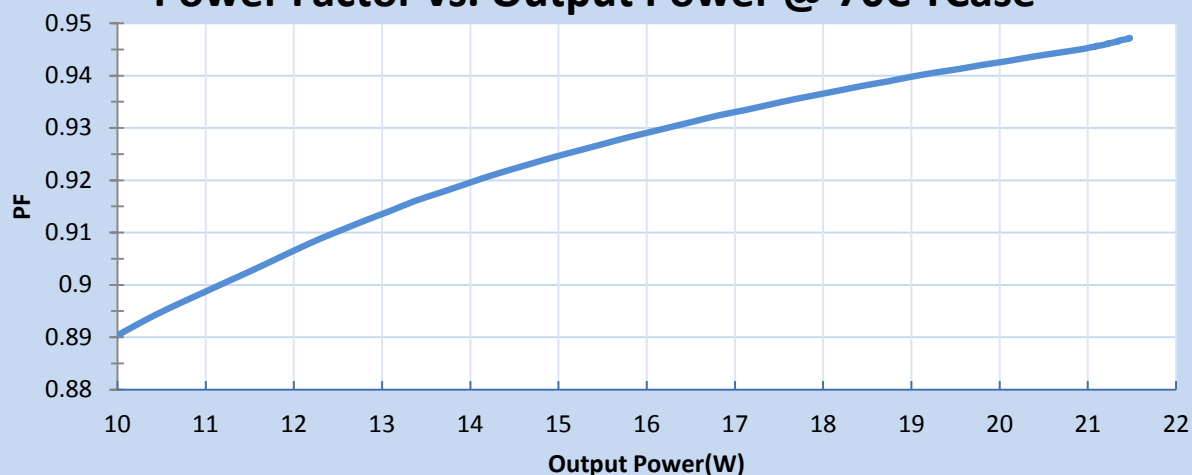
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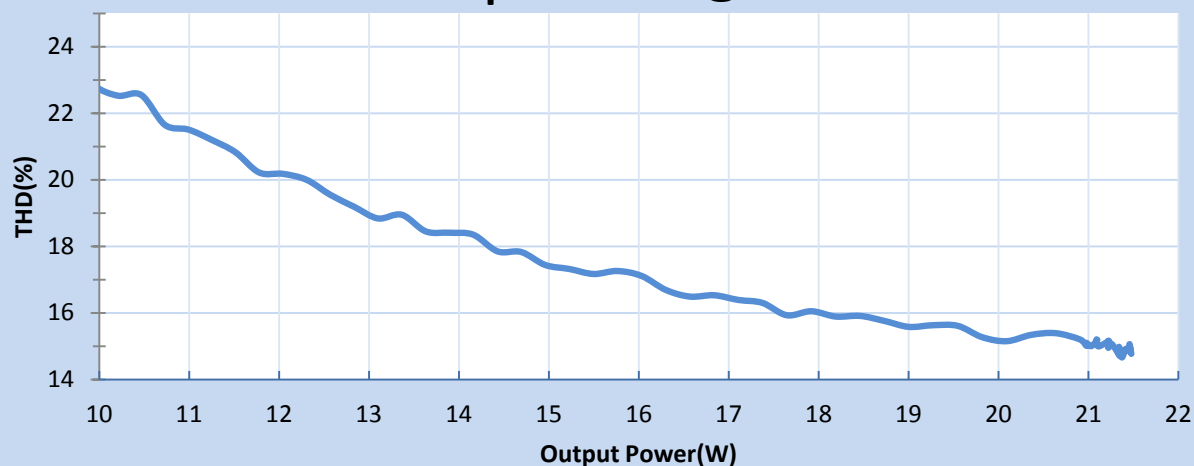
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Power Factor vs. Output Power @ 70C TCASE



THD vs. Output Power @70C TCASE



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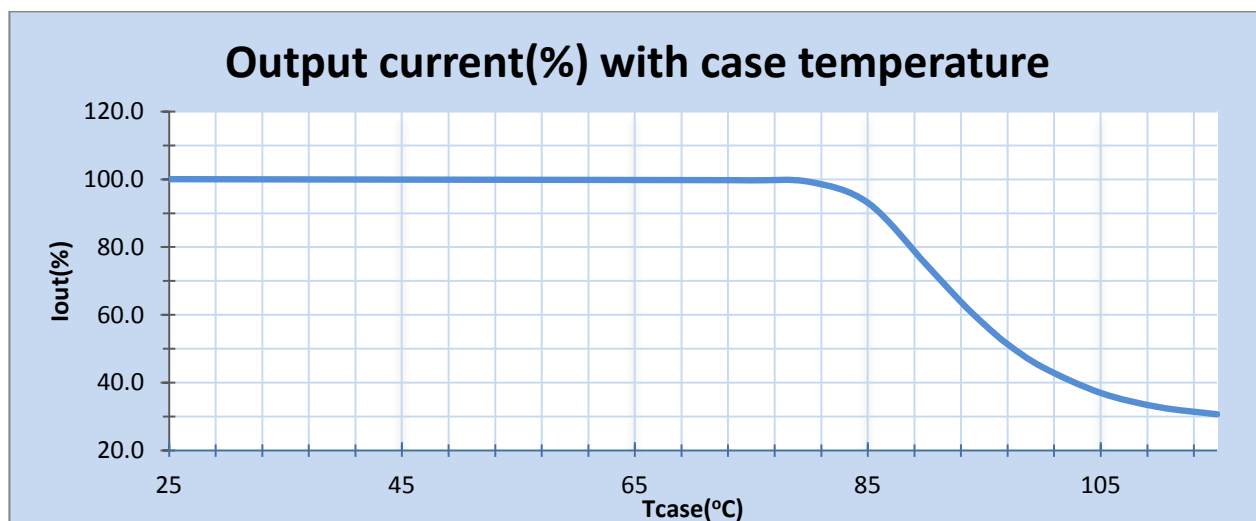
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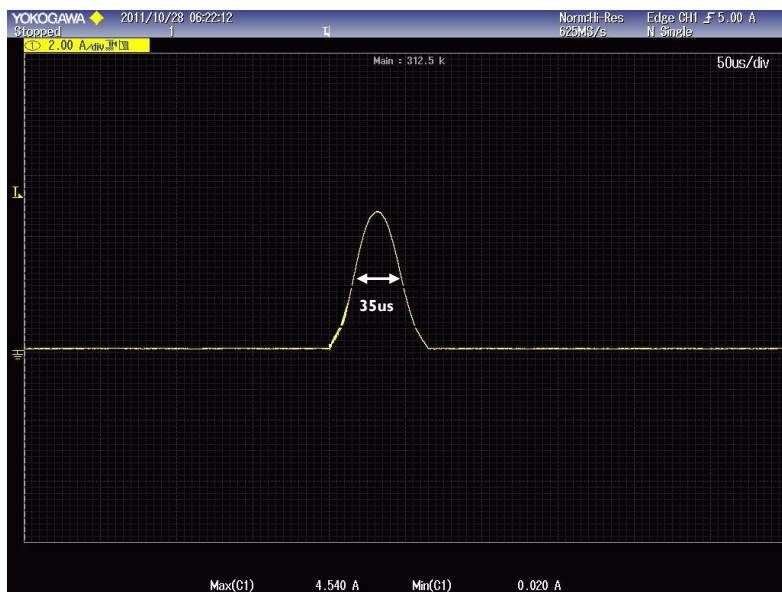
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Iout vs. Tcase of the Driver:



Inrush Current Info:



Vin	Ipeak	Total time
305 Vrms	4.5A	35 μs

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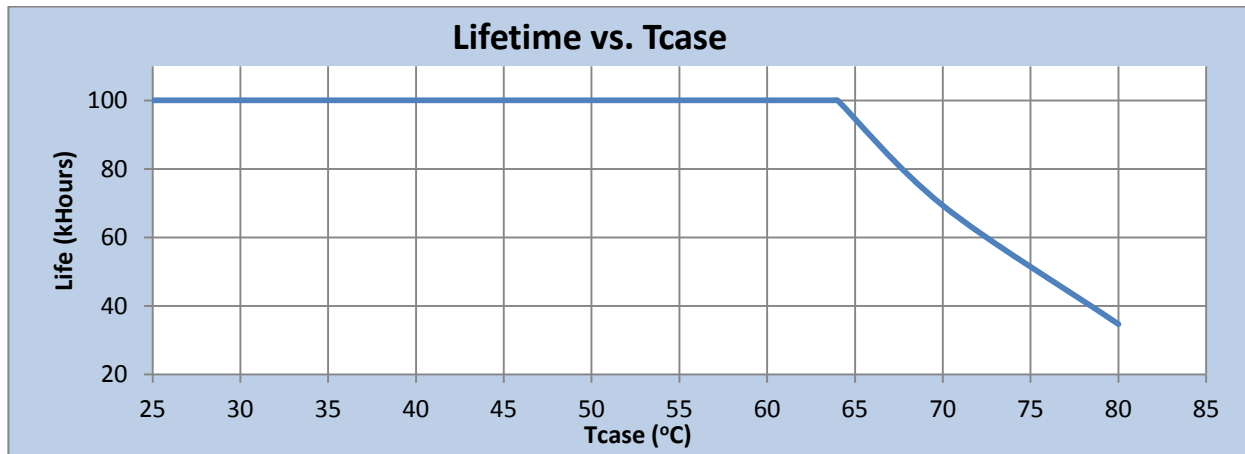
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Failure Rate Info:

1. < 0.01% per 1 kHr @ ≤ Tcase 65 C

Lifetime vs. Tcase:



Isolation:

Isolation	Input Wires	Output Wires	0-10V Wires
Input Wires	NA	1750Vrms	1750 Vrms
Output Wires	1750 Vrms	NA	NA
0-10V Wires	1750 Vrms	NA	NA

Revision History:

Rev No.	Date	Description	Approval	Remarks
1.1	01/17/2012	* Add Envir. Protection Rating	N.T	

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