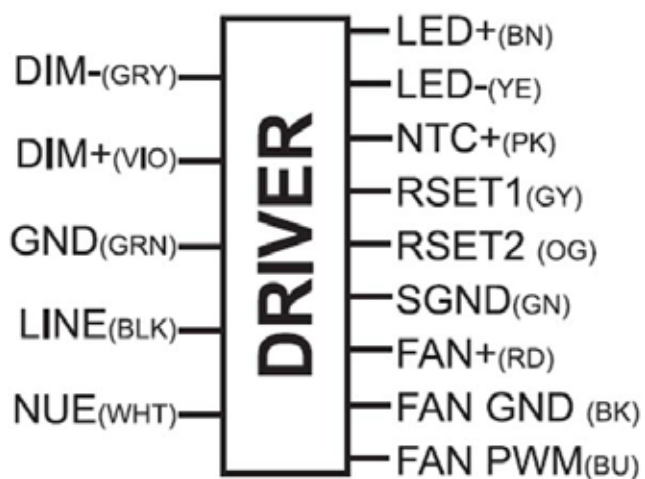


Electrical Specifications

Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency@ Max Load		Max Case Temp. (°C)	Input Current		Max. Input Power (W)	Inrush Current (A _{pk} /50%-μs)		THD @ Max Load (%)		Power Factor @ Max Load		Surge Protection Common/ Diff (KV)	Weight (Lbs/kgs)	Envir. Protection Rating
25	18 ~ 36	0.3-1.0	120V	277V	75 °C	120V	277V	34	120 Vin	277 Vin	120 Vin	277 Vin	120 Vin	277 Vin	1.5/1.5	0.429/ 0.195	UL Dry & Damp
			81.5%	82%		0.28A	0.12A		9/ 160	19.6/ 160	9.92	13.8	>0.9	>0.9			

Wire Diagram



Input and output use lead- wires.
Lead-wires are 18AWG 105C/600V solid copper.

Dimming Method	Dimming Range	Minimum Output Current (A)	Min (typ). Output Power(W)	Other Comments
0-10V	10% ~ 100%	0.03	0.5	@120V Only
Trailing edged	10% ~ 100%	0.03	0.5	

Enclosure



	in. (mm)
Case Length	5.826 (148)
Case Width	1.79 (45.6)
Case Height	1.2 (30.5)
Mounting Length	5.31 (135)
Mounting Width	1.79 (45.6)



Revised 10/01/2012

Xitanium XI025C100V036XPL1

25W 0.3-1.0A TE/0-10V

Electrical Specifications

XI025C100V036XPL1	
Brand Name	XITANIUM
Description	XITANIUM 25W 0.3-1.0A TE/0-10V
Input Voltage	120/277V
Input Frequency	60Hz
RoHS	Yes
Status	Active

Product Data	
Order code	XI025C100V036XPL1
Full product code	XI025C100V036XPL1
Full product name	Xitanium 25W 0.3-1.0A TE/0-10V Dimming
Net weight per piece	0.429lbs / 0.195kg
Interfaces	0-10V Dimming
Ambient Temp Range	-20C to +50C
Corresponding Tcase	-15C to +75C
Line Voltage	120V /277v
Line Current	0.28A @ 120V; 0.12A @277v
Line Frequency	60Hz
Envir. Protection Rating	UL Dry & Damp
Life @ TC 65 C	50000 hr
Suitable for Outdoor use?	NO
Max TC	75C
Inrush current Width	Refer to table
Min ballast number on MCB 16A type B	20
Input Over-voltage	Can survive input over-voltage stress of 320VAC for 48 hours and 350VAC for 2 hours
LED Current Tolerance	+/- 5% with full load
Earth leakage current	0.7 mA [max]
Mains voltage safety (AC)	+/-10%
Mains voltage performance (AC)	+/-10%
Min. Mains voltage operational	108 V [min]
Output peak voltage	40V [max]
Output Current ripple	20% @ 1000 mA (ripple = pk/avg)
THD total	< 20% @ max load
PF @ Max Load	>0.90
Wire Isolation	All wires are Double isolated to ground
Protections	Short Circuit and Open Circuit Protection for LED + and LED-

Revised 10/01/2012

Xitanium XI025C100V036XPL1

25W 0.3-1.0A TE/O-10V

Electrical Specifications

XI025C100V036XPL1	
Brand Name	XITANIUM
Description	XITANIUM 25W 0.3-1.0A TE/O-10V
Input Voltage	120/277V
Input Frequency	60Hz
RoHS	Yes
Status	Active

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 ≤65°C.
- 2.2 LED Driver tolerates sustained open circuit and short circuit output conditions without damage.
- 2.3 LED Driver maximum allowable case temperature is 75°C – see product label for measurement location.
- 2.4 LED Driver complies with the requirements of UL, CSA, FCC47 subpart 15.

Section III – UL Conditions of Acceptability (File E321253)

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

- 3.1 The equipment shall be installed in compliance with the enclosure, enclosure, mounting, spacing, casualty and the segregation requirements of the ultimate application.
- 3.2 Consideration should be given to measuring the temperatures on electronic components of power circuits and transformer windings when the unit is installed in the end-use equipment based upon mounting orientation, operating ambient and ventilation. Magnetic components L200, L300, L500 employ Class 130(B) insulation.
- 3.3 These drivers should be used within the recognized ratings.
- 3.4 The driver is suitable for use in “DAMP” and “DRY” locations.
- 3.5 The maximum available output parameters from 0-10v dimming circuit provided on LED driver were tested in accordance with supplement (SB) of UL935 and was found permissible for connection via Class 2 wiring.
- 3.6 When the drivers are installed in the end-use application, the case temperature should not exceed the temperature limits specified in the following table:

Model No.	Input Voltage, Hz	Max. Case @ Tc, °C
XI025C100V036XPL1	120/277V, 60 Hz	75

- 3.7 The maximum measured leakage current was 0.230 MIU while was connected to a 277 V branch Source.

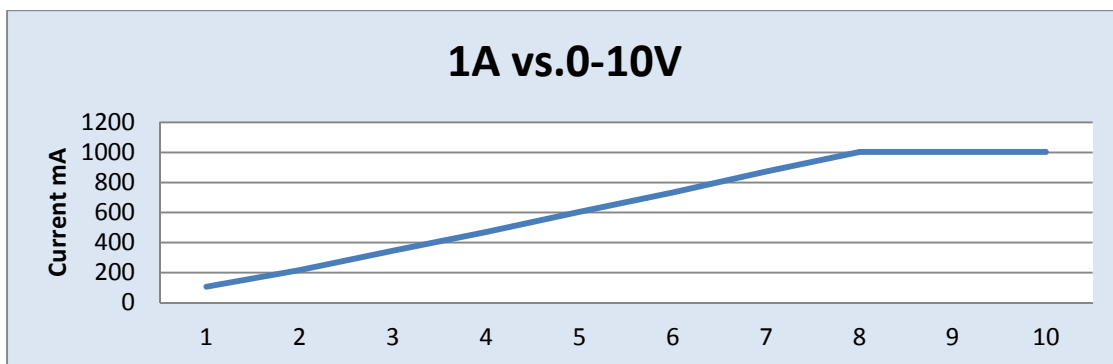
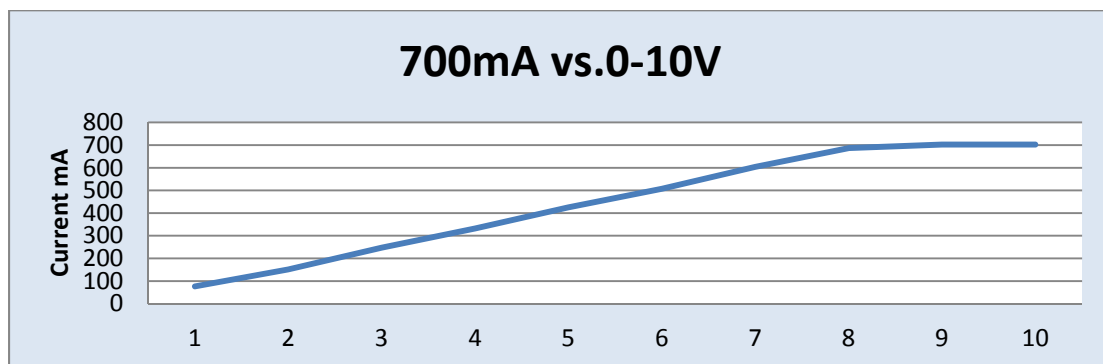
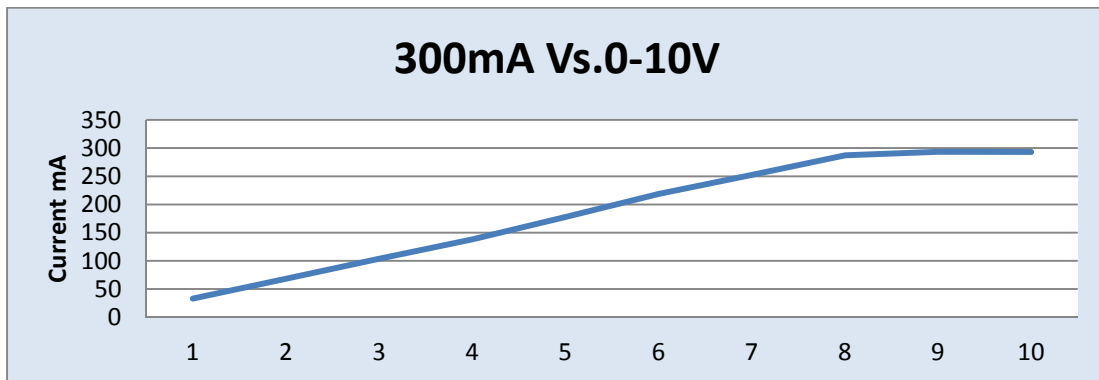
Revised 10/01/2012

Xitanium XI025C100V036XPL1

25W 0.3-1.0A TE/0-10V

Electrical Specifications

XI025C100V036XPL1	
Brand Name	XITANIUM
Description	XITANIUM 25W 0.3-1.0A TE/0-10V
Input Voltage	I20/277V
Input Frequency	60Hz
RoHS	Yes
Status	Active



Revised 10/01/2012

Xitanium XI025C100V036XPL1

25W 0.3-1.0A TE/0-10V

Electrical Specifications

XI025C100V036XPL1	
Brand Name	XITANIUM
Description	XITANIUM 25W 0.3-1.0A TE/0-10V
Input Voltage	120/277V
Input Frequency	60Hz
RoHS	Yes
Status	Active

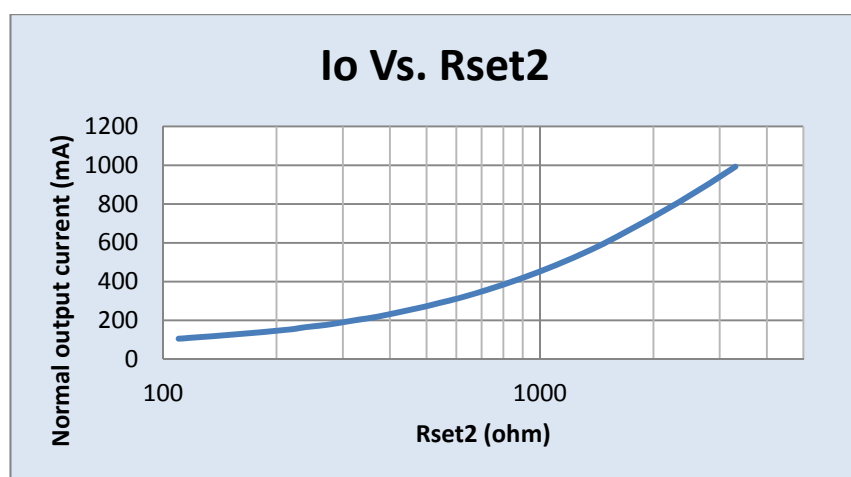
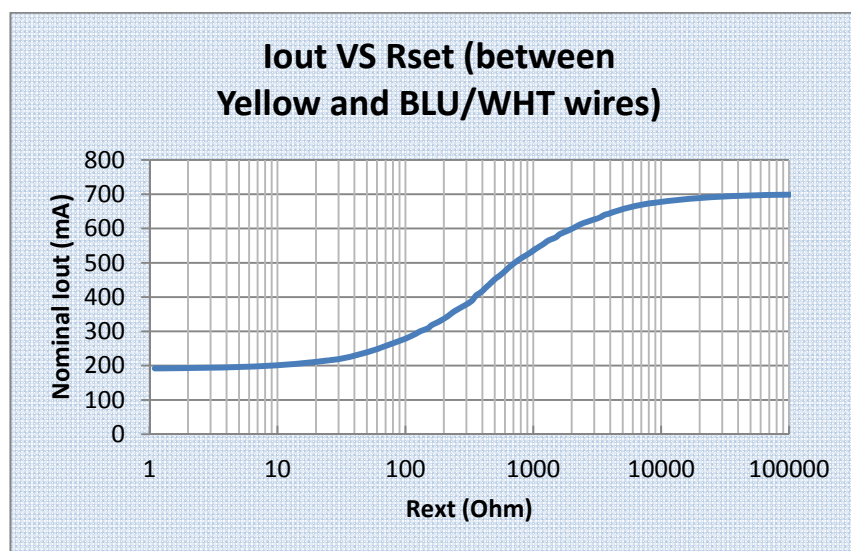
AOC (Adjustable Output Current) Settings:

LED current tolerance with variation of Rset 1 is within +/- 5% of Imax

1.1 Rset2 Table

(Valid Range of Current 0.3-1.0A)

Rset1 (Ohms)	Current(mA)
1	191
100	214
620	309
910	347
935	350
1500	406
2200	455
3000	494
4115	530
4300	536
8200	599
18000	649
100000	691
1000000	700



Rset2 (Ohms)	Current(mA)
100	100
270	176.4368
360	214.6552
470	261.0632
560	296.5517
750	367.5287
1000	452.1552
1300	544.9713
1500	602.2989
1800	684.1954
2700	883.477
3300	992.6724

Revised 10/01/2012

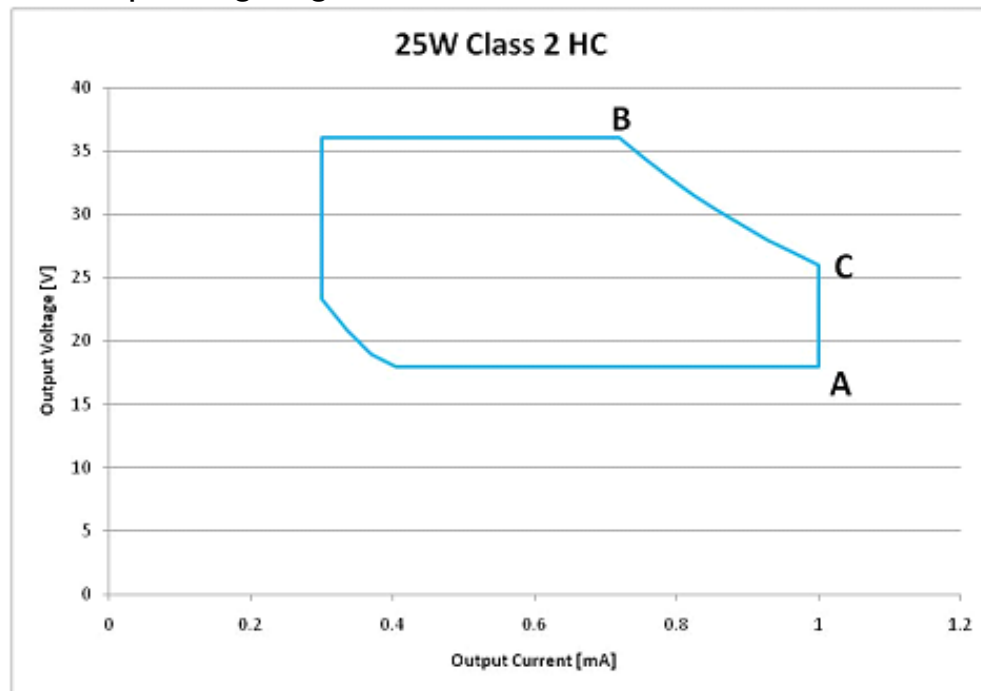
Xitanium XI025C100V036XPL1

25W 0.3-1.0A TE/0-10V

Electrical Specifications

XI025C100V036XPL1	
Brand Name	XITANIUM
Description	XITANIUM 25W 0.3-1.0A TE/0-10V
Input Voltage	I20/277V
Input Frequency	60Hz
RoHS	Yes
Status	Active

25W high current, operating range 18-36V, 300-1000mA:



Edged Dimming performance note:

- Between 27V and 36V (full load) dimming performance is ok for all dimmers;
- Between 24V and 27V (full load) dimming performance (instabilities in light level) is dimmer dependent;
- Below 27V (full load) not recommended, instabilities in light level may occur during dimming and switching on.

Revised 10/01/2012

Xitanium XI025C100V036XPL1

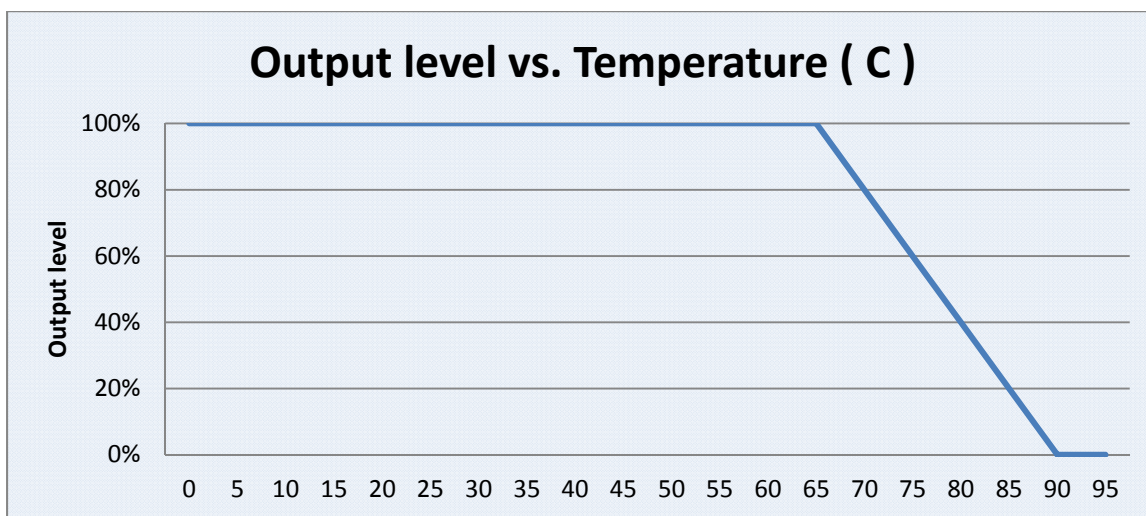
25W 0.3-1.0A TE/0-10V

Electrical Specifications

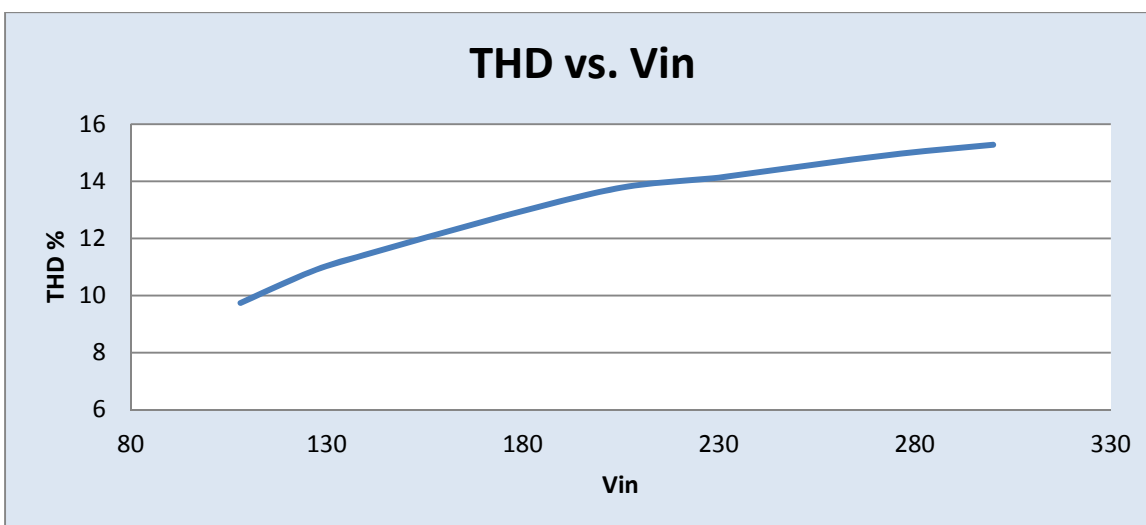
XI025C100V036XPL1	
Brand Name	XITANIUM
Description	XITANIUM 25W 0.3-1.0A TE/0-10V
Input Voltage	120/277V
Input Frequency	60Hz
RoHS	Yes
Status	Active

Module Thermal Protection can be implemented between 65C to 90C. Please refer to design guide for more details

NTC part can be used: NTC from Vishay, part number is 238161554153 (15kOhm $\pm$ 2% NTC, B25/85=3700)



THD vs. Vin of Driver (full load):



Revised 10/01/2012

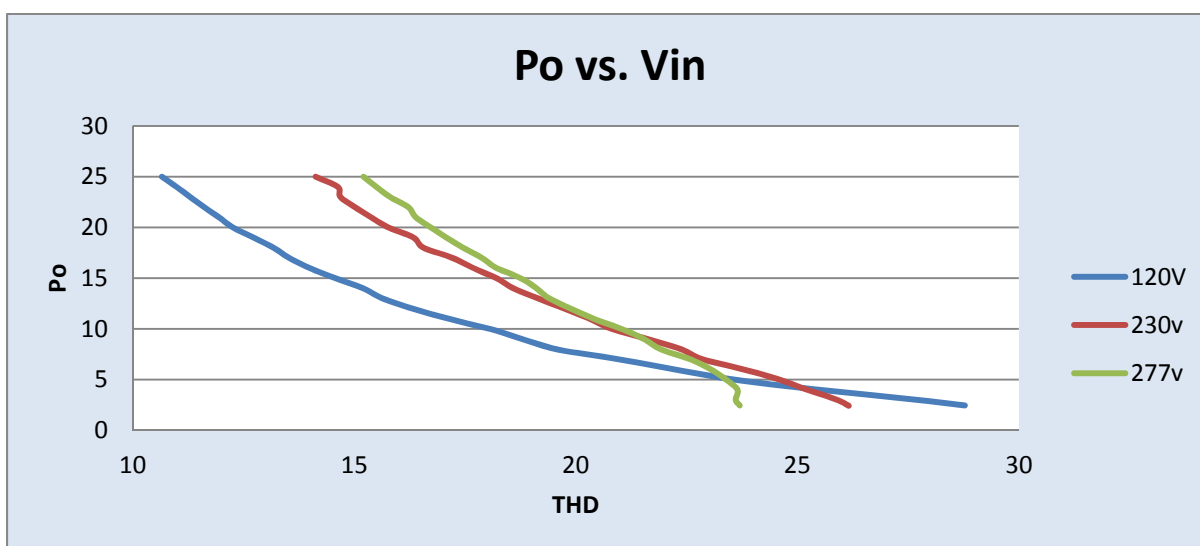
Xitanium XI025C100V036XPL1

25W 0.3-1.0A TE/O-10V

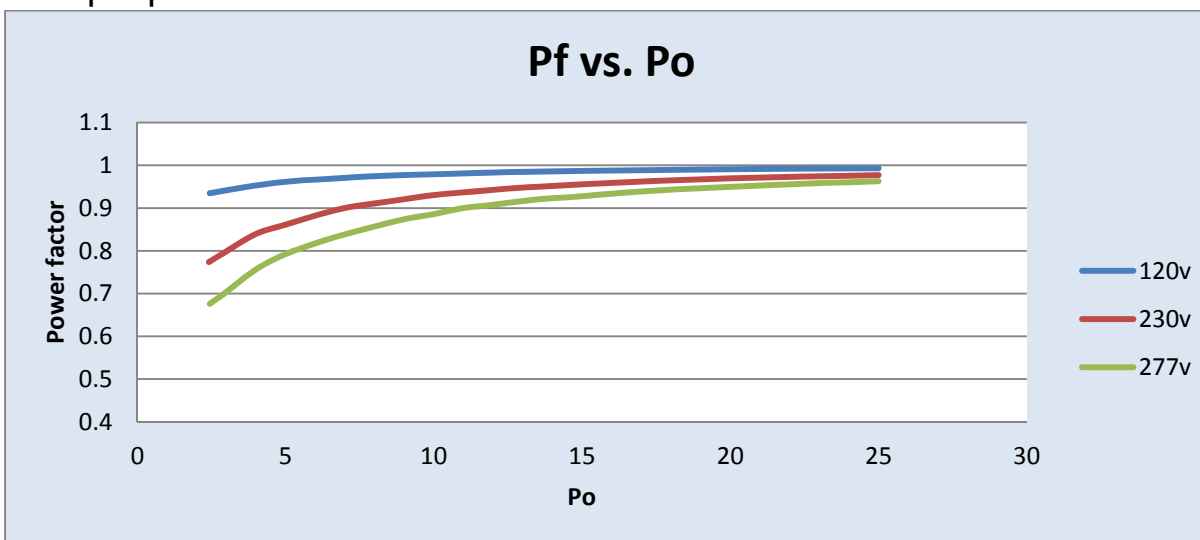
Electrical Specifications

XI025C100V036XPL1	
Brand Name	XITANIUM
Description	XITANIUM 25W 0.3-1.0A TE/O-10V
Input Voltage	120/277V
Input Frequency	60Hz
RoHS	Yes
Status	Active

Output Power vs. THD



PF vs. Output power



Revised 10/01/2012

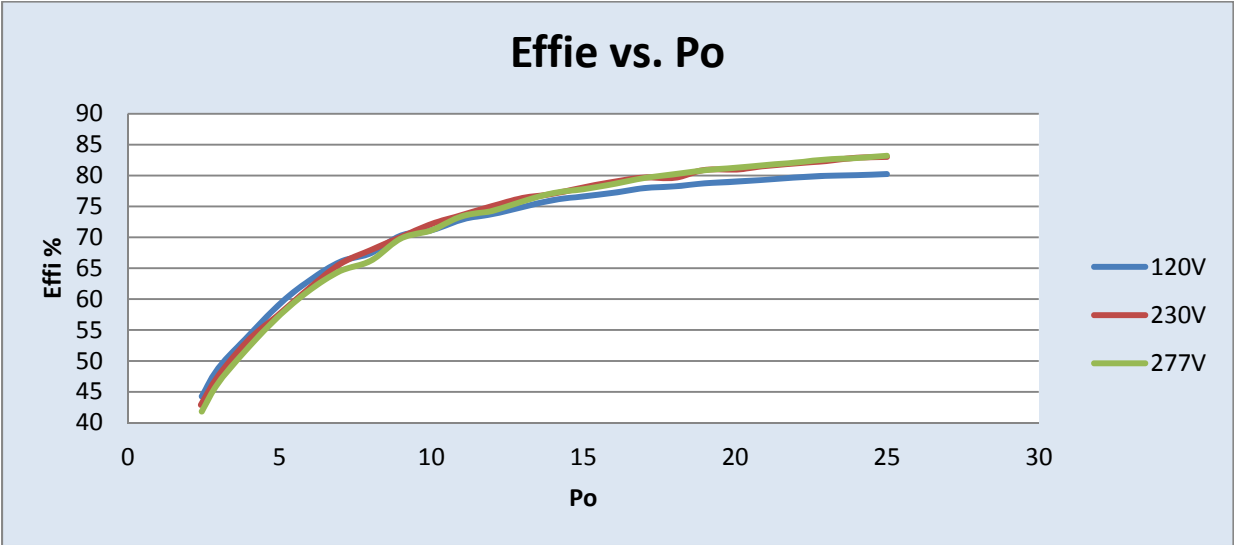
Xitanium XI025C100V036XPL1

25W 0.3-1.0A TE/0-10V

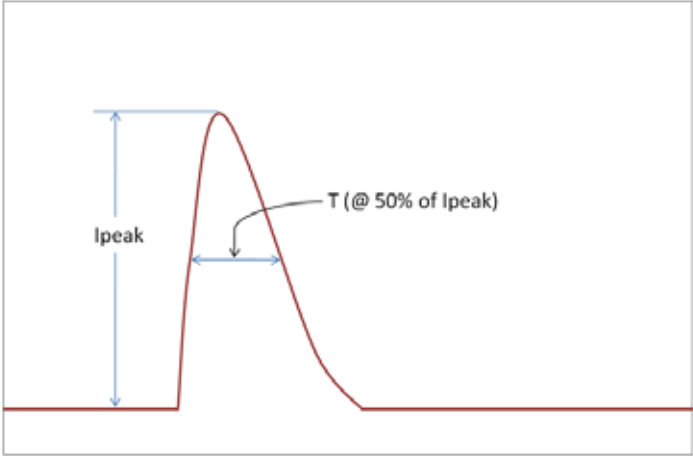
Electrical Specifications

XI025C100V036XPL1	
Brand Name	XITANIUM
Description	XITANIUM 25W 0.3-1.0A TE/0-10V
Input Voltage	120/277V
Input Frequency	60Hz
RoHS	Yes
Status	Active

Efficiency vs. Output power



Inrush Current Info:



Vin	Ipeak	T (@ 50% of Ipeak)
120 Vrms	9 A	160 μ s
277 Vrms	19.6 A	160 μ s

Revised 10/01/2012

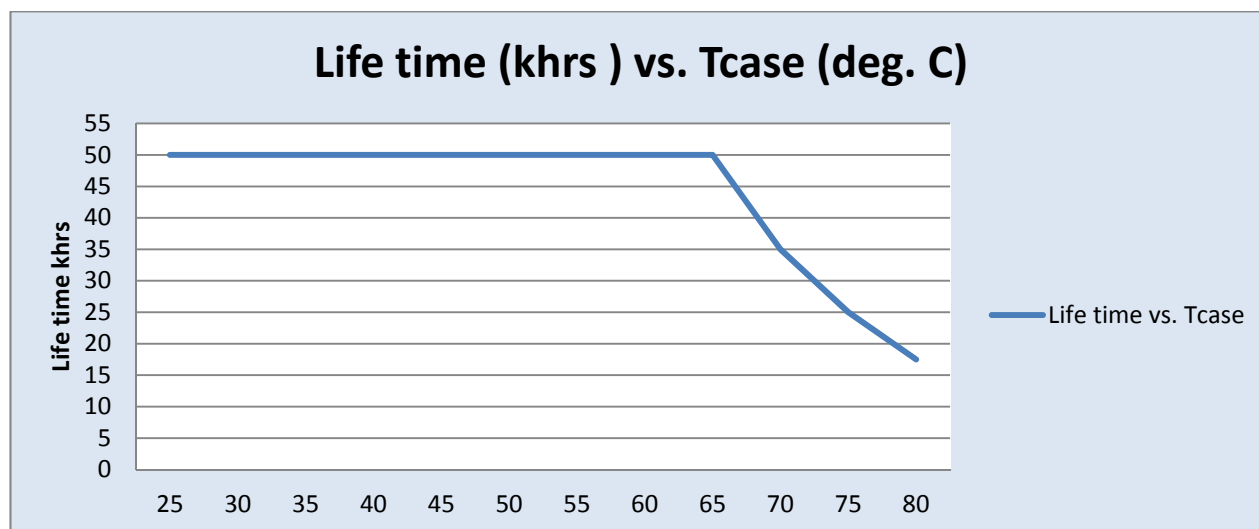
Xitanium XI025C100V036XPL1

25W 0.3-1.0A TE/0-10V

Electrical Specifications

XI025C100V036XPL1	
Brand Name	XITANIUM
Description	XITANIUM 25W 0.3-1.0A TE/0-10V
Input Voltage	I20/277V
Input Frequency	60Hz
RoHS	Yes
Status	Active

Lifetime vs. Tcase of Driver:



Failure Rate Info:

1. <0.2% per 1 kHr @<= Tcase 75 C

Isolation:

Isolation	Input Wires	Output Wires	0-10v Wires	Chassis
Input Wires	NA	2150	1500	2150
0-10v Wires	1500	500	NA	500
Chassis	2150	500	500	NA

Only for I20V input:

Dimmer compatibility list	Lightolier ZP260QE (ELV 3-way)
	Lutron DVELV-303P (ELV 3-way)
	Leviton VZE06-1LZ (ELV 3-way)
	Lutron SELV-300P
	Lightolier ZP425QE
	Leviton IPEO4-1LX

Revised 10/01/2012

Xitanium XI025C100V036XPL1

25W 0.3-1.0A TE/O-10V

Electrical Specifications

XI025C100V036XPL1	
Brand Name	XITANIUM
Description	XITANIUM 25W 0.3-1.0A TE/O-10V
Input Voltage	120/277V
Input Frequency	60Hz
RoHS	Yes
Status	Active

Revision History:

Rev No.	Date	Description	Approval	Remarks
1.1	1/20/2012	* Add Envir. Protection Rating	N.T.	
1.2	03/02/2012	*Remove the "M" at the end of part#	N.T.	
1.3	03/05/2012	*Update Rset2 Table	N.T.	
1.4	10/01/2012	*Added dimming limitation	S.B.	

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

