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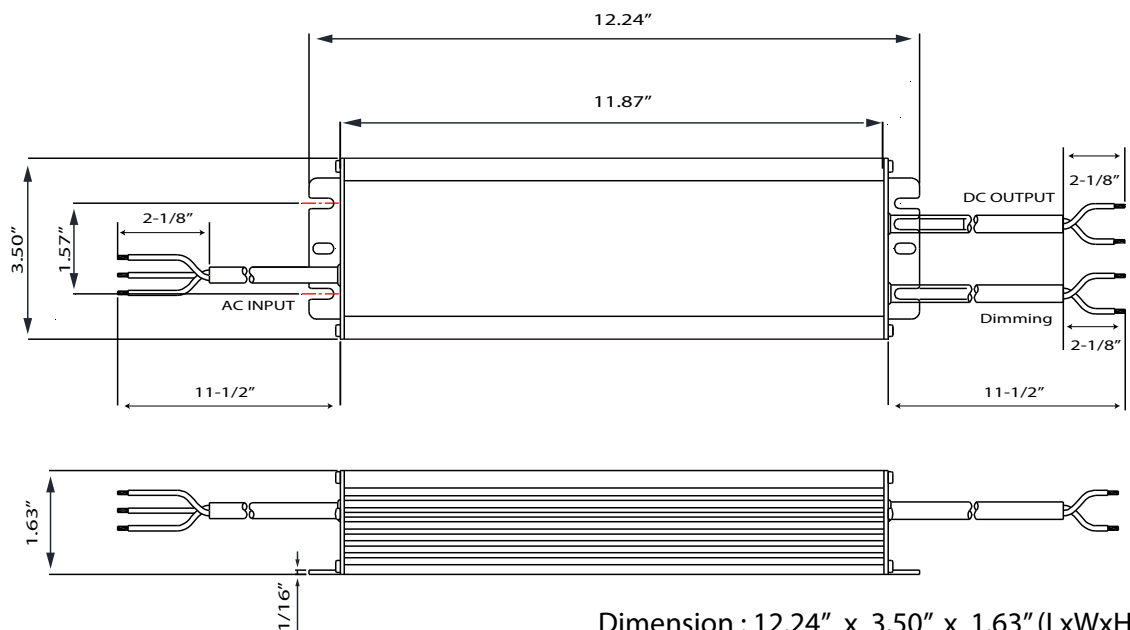


Product Features

- Universal input voltage / Full range: 90~305Vac
- Constant power Design, output current programming adjustable
- Constant lumen output
- 3-in-1 dimmable: 0~10Vdc/PWM/Timer dimming (Dim-to-off)
- Auxiliary power supply: 12V/200mA
- Surge protection: 6KV Line-Line, 10KV Line-Earth
- Protections: SCP/OVP/OTP
- IP67 design for indoor and outdoor applications
- Metal case, suitable for dry, damp and wet locations
- 5 Years warranty
- Best use in, Horticulture Lighting, high power lighting etc.

Model N°	Max Output Power (W)	Output Volt. (Vdc)	Full Power Output Volt. (Vdc)	THD (Typ)	Default Output Current Setting (A)	Typical Efficiency	Power Factor
P7-500M056A12	500W	30-56V	48-56V	5%	8.92	95%	0.96

Physical



Dimension : 12.24" x 3.50" x 1.63" (LxWxH)

Weight : 4.85 +/- 0.22 lbs

General Specifications

Parameter		Description			Notes
		Min.	Typ.	Max.	
Efficiency @120Vac	Io: 8.92A	91.5%	93%	–	Measured at full load and 25°C - ambient temperature
Efficiency @230Vac	Io: 8.92A	93.5%	95%	–	Measured at full load and 25°C - ambient temperature
Efficiency @277Vac	Io: 8.92A	94%	95.5%	–	Measured at full load and 25°C - ambient temperature
Dielectric Strength	Input-Output	–	3750Vac	–	Maximum 5mA/60S
	Input-Ground	–	1600Vac	–	
	Output-Ground	–	1600Vac	–	
	Input-Ground	–	1600Vac	–	
	Output-Ground	–	1600Vac	–	
Grounding Resistance		–	–	0.1Ω	25A/60S, under 25°C +/- 10°C ambient temperature
Insulation Resistance		10MΩ	–	–	Input-Output, Input-PE, Output-PE, 500Vdc/60S/25°C/70%RH
MTBF (Hr)		–	200KHours	–	25°C, 80% Load
Lifetime (Hr)		–	100Khours	–	230Vac&80%, Output 70°C case temp., refer to lifetime curve for details.
Operating Temperature Ta		-40°C	–	+45°C	100-200Vac, Output Power Vs, Ambient Temp. Curve
Operating Temperature Ta		-40°C	–	+50°C	100-277Vac, Output Power Vs, Ambient Temp. Curve
Operating Tc for Safety Tc_s		-40°C	–	+90°C	
Operating Tc for Warranty Tc_w		-40°C	–	+75°C	5 years warranty case temp. Humidity: 10% to 95% RH
Storage Temperature		-40°C	–	+85°C	
Working Elevation		-50m	–	4000m	Humidity: 5% to 100% RH
Input Under Voltage Protection		65Vac	75Vac	85Vac	Turn off the output or hiccup when the input volt. falls below protection Volt.
Over Temperature Protection Tc		90	100	110	Decrease output current, returning to normal after over temp. is removed
Net Weight		4.85 +/- 0.22 Lbs/pc			
Dimensions		12.24" * 3.50" * 1.63" (L*W*H)			

Input Specifications

Parameter	Description			Notes
	Min.	Typ.	Max.	
Input Voltage Range	90Vac	120-277Vac	305Vac	
Input Frequency AC	47Hz	50/60Hz	63Hz	
Max Input Current	–	–	5A	120Vac & 100% load
Max Input Power	–	–	550W	120Vac & 100% load
Inrush Current	–	–	25A	230Vac, 100%
Standby Power Consumption	–	–	0.5W	230Vac 50Hz; dim-of-off
Leakage Current	–	–	0.70mA	240Vac/60Hz
	–	–	0.75 MIU	277Vac/60Hz
Power Factor	0.97	0.99	–	120Vac, 50-60Hz, 80%-100% load
	0.95	0.97	–	230Vac, 50-60Hz, 80%-100% load
	0.90	0.94	–	277Vac, 50-60Hz, 80%-100% load
THD	–	5%	10%	
	–	–	20%	120-277Vac, 50-60Hz, 70-100% load
	–	–	20%	120-277Vac, 50-60Hz, 70-100% load

Output Specifications

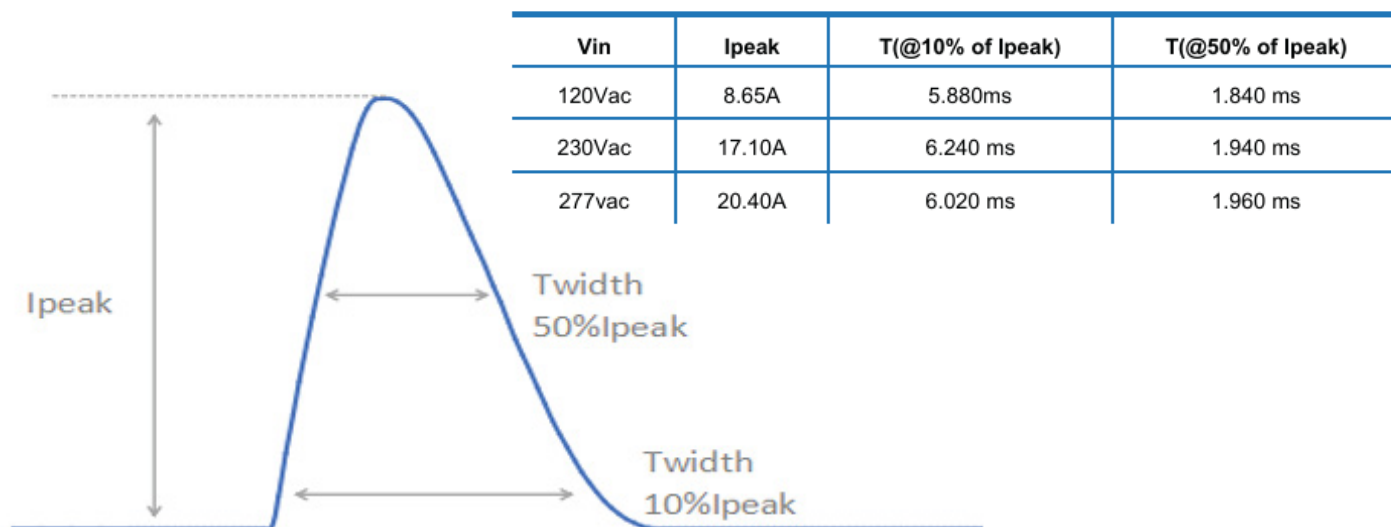
Parameter	Description			Notes
	Min.	Typ.	Max.	
Output Voltage Range	30Vdc	–	56Vdc	
Open Circuit Voltage	–	–	60Vdc	
Output Current Range	1.05	–	10.5	Adjustable Output Current with Programmer
Full Power Current Range	8.92A	–	10.5A	
Current Accuracy	5%	–	+/-5%	
Total Output Current Ripple (pk-pk)	–	+/-5%	+/-10%	20MHz BW Full load&LED load the LED Ripple is slightly different for different leds
Starup Overshoot Current	–	–	10%	120-277Vac Full load contidion, LED load
Line Regulation	-1%	–	1%	25°C 10°C ambient temp, input volt. 230Vac, load changes from 60% to 100%
Load Regulation	–3%	–	+3%	Load varies from 70% to 100% with 230Vac Input at 25°C +/- 10°C ambient temperature.
Turn-on Delay time	–	–	1.0s	230-277Vac, 100% load, at 25°C +/- 10°C ambient temp.
	–	–	1.5s	120Vac, 100% load, at 25°C +/- 10°C ambient Temp.
AUX. Power Output Current (mA)	11.04	12	12.96	
AUX. Power Output Voltage (V)	0	–	200	

Dimming Specifications

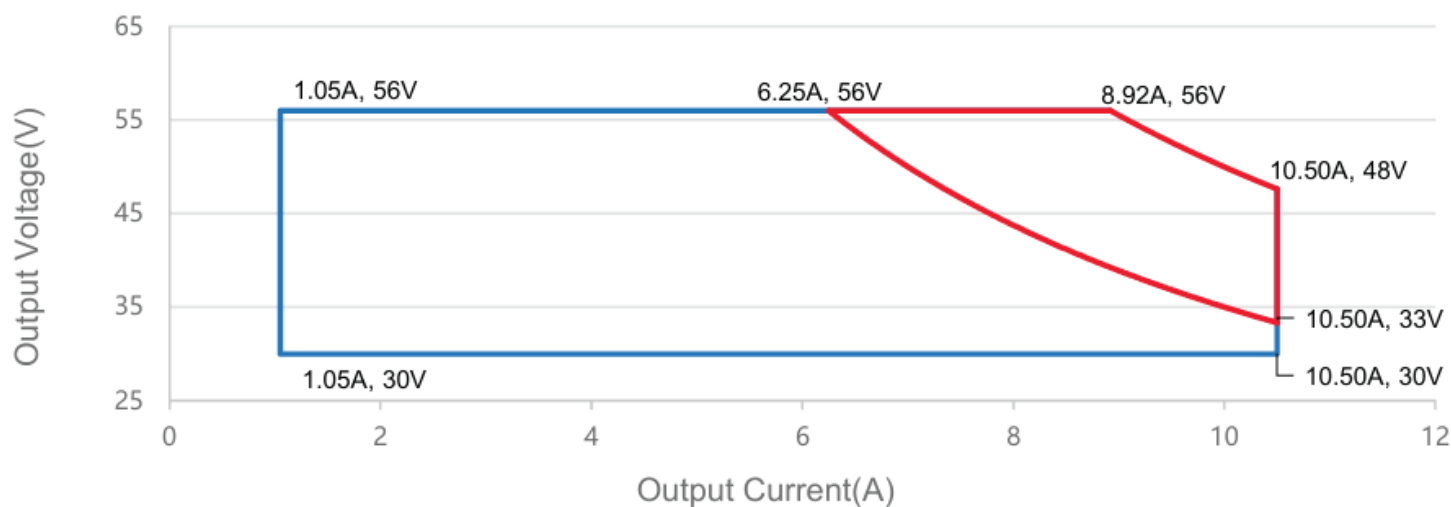
Parameter	Description			Notes
	Min.	Typ.	Max.	
0~10V Absolute Maximum Voltage on the Vdim (+) Pin	–	10V	15V	
0~10V Source Current on Vdim (+) Pin (mA)	90UA	100UA	120UA	
Dimming Output Range	10%Iset	–	100%Iset	Iset is the set to powe range = 8.92-10.5A
Suggest Dimming Input 0-10V	0V	–	10V	When the dimming light is the suspended state, The output can be set to 0% or 100% by Software
Turn-on Voltage	0.8V	1.0V	1.1V	
Turn-off Voltage	0.6V	0.8V	0.9V	
PWM In High Level	9.7V	–	10.5V	
PWM In Low Level	0V	–	0.3V	
PWM In Frequency Range	300Hz	–	2KHz	
PWM In Duty Cycle	1%	–	99%	
Turn-on Duty Cycle	8%	10%	11%	
Turn-off Duty Cycle	6%	8%	9%	
Res. Dimming	0	–	100KOhm	
Output Lumen Compensation	–	–	–	Constant Lumen Output Function

Specification

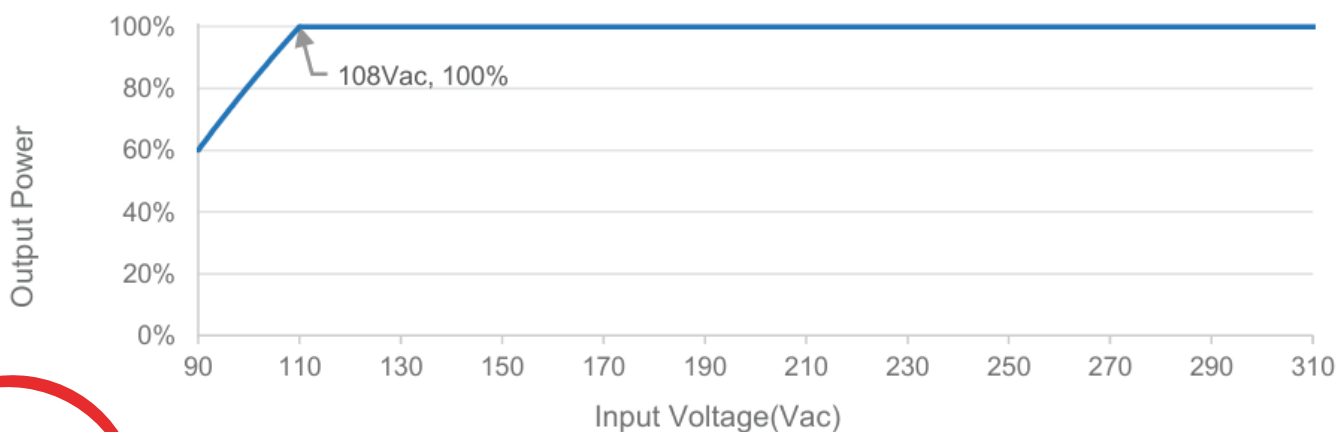
Inrush Current



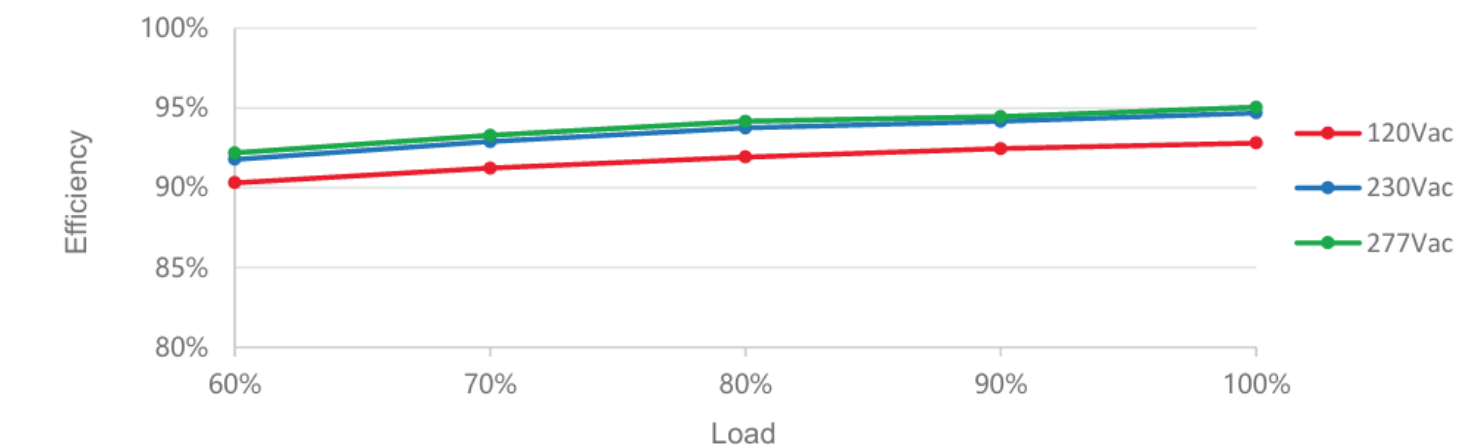
Output Voltage vs. Output Current



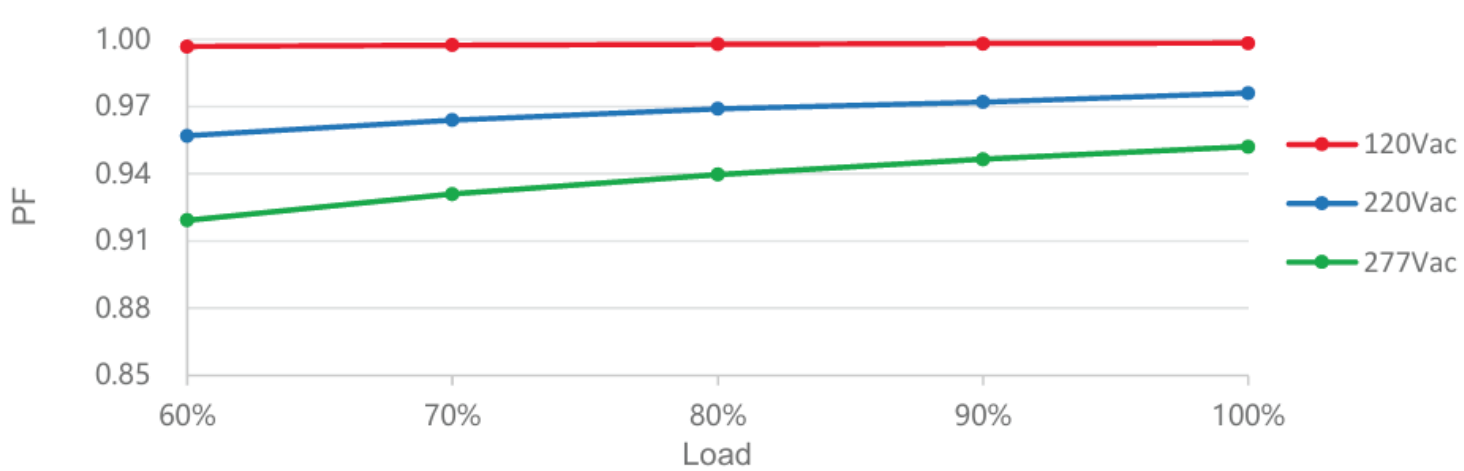
Output Power vs. Input Voltage



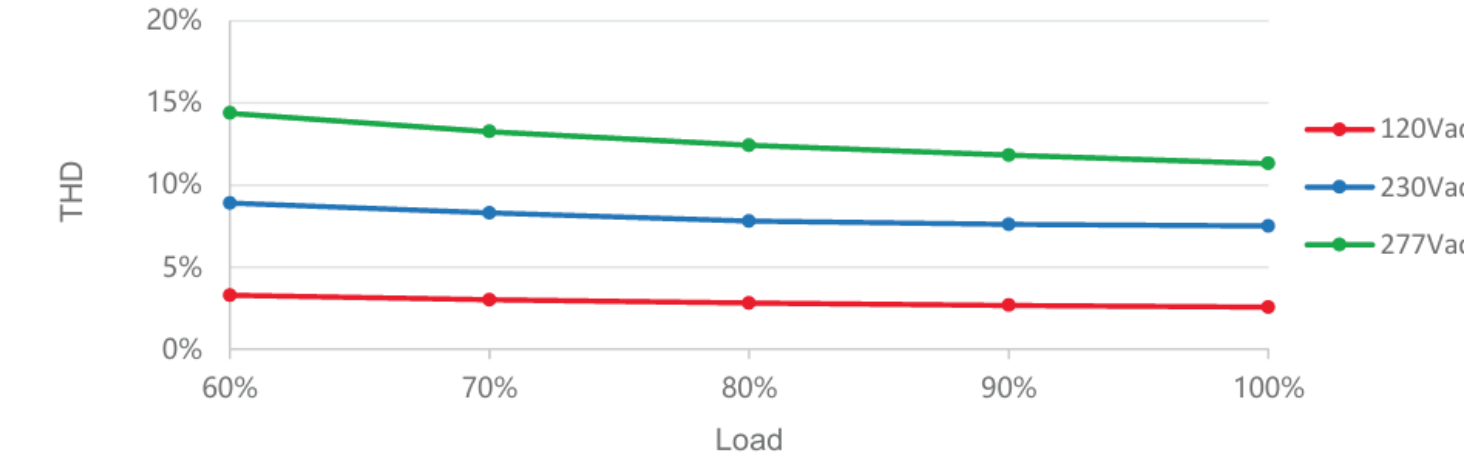
Efficient vs. Load



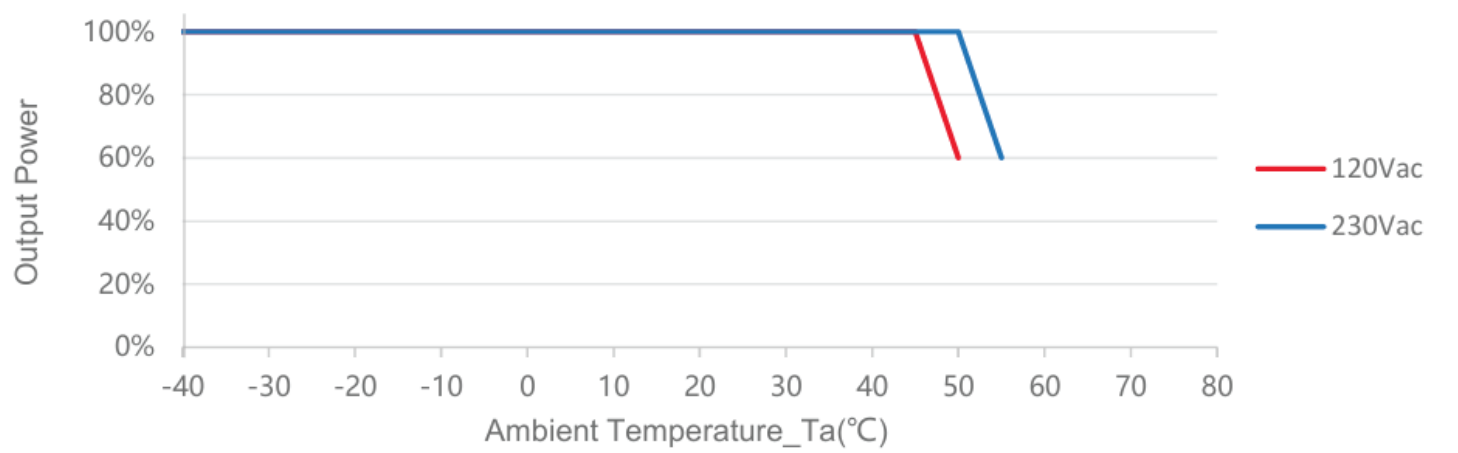
PF vs. Load



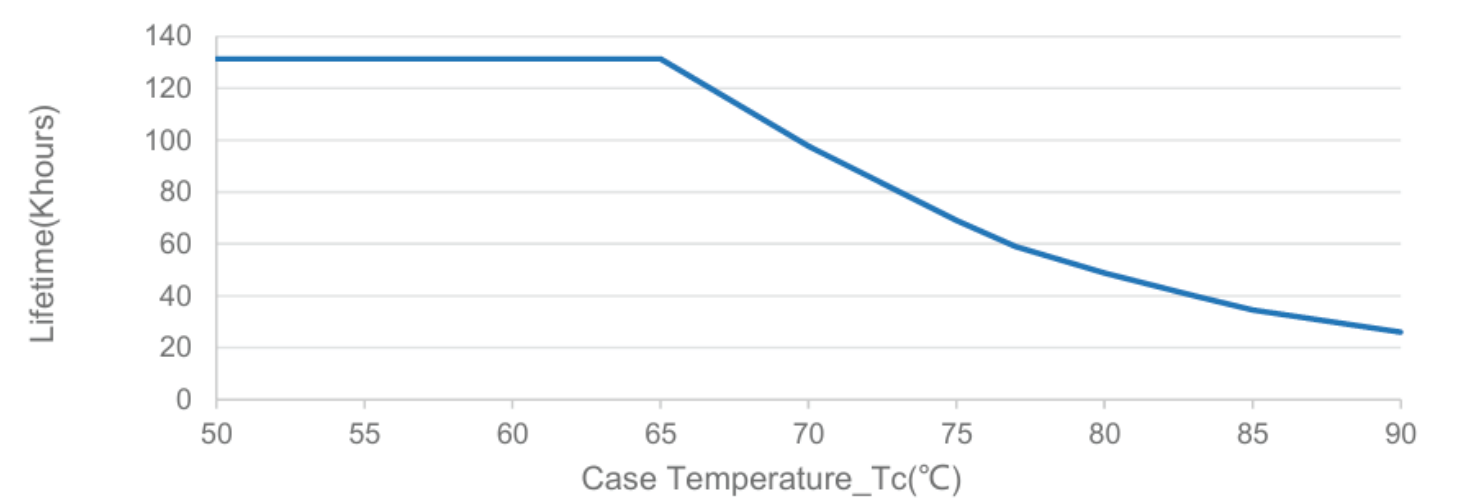
THD vs. Load



Output Power vs. Ambient Temperature



Lifetime vs Case Temperature



0-10V/PWM Dimming

