

## DBFN Series

**FEATURES:**

- AC Input 100~277VAC
- Built-in Active PFC Function
- Protection: SCP / OVP / OTP
- 24V Auxillary Output
- 0-10V Dimming Control
- Flicker Free
- High Operating Ambient Temp.: 0°C~+50°C
- Surge protection: L-N 2KV
- Safety: UL 8750 / PSE
- EMI: FCC Part 15 Class B / CE
- Comply with Indoor
- Warranty: 7 years (refer to warranty policy)
- RoHS Compliant

**PRODUCT SPECIFICATION**

MODEL	DC OUTPUT POWER (W)	DC OUTPUT VOLTAGE (V)	OUTPUT CURRENT (A)	OUTPUT CURRENT TOLERANCE	EFFICIENCY (Typ.)				Power Factor (Typ.)			
					100VAC	120VAC	200VAC	277VAC	100VAC	120VAC	200VAC	277VAC
DBFN-040U152	36	12-24	1.5	±7%	84.0%	84.0%	85.0%	85.0%	0.98	0.98	0.94	0.92
DBFN-040U182	43.2	12-24	1.8	±7%	84.0%	84.0%	85.0%	85.0%	0.98	0.98	0.94	0.92
DBFN-040U142	42	15-30	1.4	±7%	85.0%	85.0%	87.0%	87.0%	0.98	0.98	0.94	0.92
DBFN-040U102	36	18-36	1	±10%	85.0%	85.0%	87.0%	87.0%	0.98	0.98	0.94	0.92
DBFN-040U901	43.2	24-48	0.9	±10%	85.0%	85.0%	87.0%	87.0%	0.98	0.98	0.94	0.92
DBFN-040U701	39.2	28-56	0.7	±7%	85.0%	85.0%	87.0%	87.0%	0.98	0.98	0.94	0.92
DBFN-050U222	52.8	12-24	2.2	±5%	84.0%	84.0%	85.0%	85.0%	0.99	0.98	0.94	0.92
DBFN-050U182	54	15-30	1.8	±7%	85.0%	85.0%	87.0%	87.0%	0.99	0.98	0.94	0.92
DBFN-050U901	50.4	24-56	0.9	±10%	85.0%	85.0%	87.0%	87.0%	0.99	0.98	0.94	0.92

**Input Specifications**

	Min.	Typ.	Max.	Units	Conditions/Description
Input Voltage Range	90		305	Vac	
Input Frequency Range	47		63	Hz	
Input Current			0.8	A	100VAC in
Inrush Current			65	A	230VAC in, 25°C Cold start
Leakage Current			0.75	mA	277VAC in
Power Factor (PF)	0.9				
Total Harmonics Distortion (THD)			15	%	100-277VAC, 100% load

**Output Specifications**

	Min.	Typ.	Max.	Units	Conditions/Description
Line Regulation		±3		%	
Load Regulation		±3		%	
Output Current Regulation	10		10	%	
Ripple and Noise (pk-pk)			0.5	V	20MHz Bandwidth. See note (3)
Ripple Current	<30% of rated output current				*Measured at electronic load LED mode and nominal input voltage with DC10V dimming.
Turn-on Delay Time			1	s	*Measured at 100-277VAC and at full load
Auxiliary Output Voltage		24		V	± 5% Tolerance (Available for customization)
Auxiliary Output Source Current	0		0.1	A	

**Protection Functions**

	Min.	Typ.	Max.	Units	Conditions/Description
Short Circuit Protection					will restart automatically after the fault condition is removed
Over Voltage Protection					will restart automatically after the fault condition is removed
Over Temp Protection (Tc)				°C	will restart automatically after the fault condition is removed

**Environmental Conditions**

	Min.	Typ.	Max.	Units	Conditions/Description
Operating Temperature (Ta)	0		50	°C	Non-condensing
Operating Humidity	10		90	%RH	Non-condensing
Operating Case Temperature (Tc)			75	°C	Case temperature measured at the case hot spot
Storage Temperature	-20		80	°C	Non-condensing
Storage Humidity	10		95	%RH	Non-condensing
Life Time	Measured at 277Vac, 60,000 hours at Ta 50°C for DBFN-050U222.				
Dimensions(L*W*H)	370 * 31.2 * 27.2 mm 14.5 * 1.23 * 1.07 inch				
Weight		380		g	

**DBFN Series**

0~10V Dimmable

<b>EMC Compliance and Safety</b>		
<b>EMC Compliance</b>		
<b>Conducted and Radiated Emission</b>	FCC Part 15 Class B	
<b>Harmonic Current Emissions</b>		
<b>Voltage Fluctuations &amp; Flicker</b>		
<b>EMS Standards</b>	<b>Electrostatic Discharge (ESD)</b>	8 KV air discharge, 4 KV contact discharge
	<b>RF Electromagnetic Field Susceptibility</b>	
	<b>Electrical Fast Transient</b>	
	<b>Surge Immunity</b>	L-N 2KV
	<b>Conducted RF Disturbances</b>	
	<b>Power Frequency Magnetic Field</b>	
	<b>Voltage Dips</b>	
<b>Safety</b>		
<b>UL</b>	<b>UL 8750</b>	
<b>PSE</b>	<b>Comply with PSE</b>	

Notes

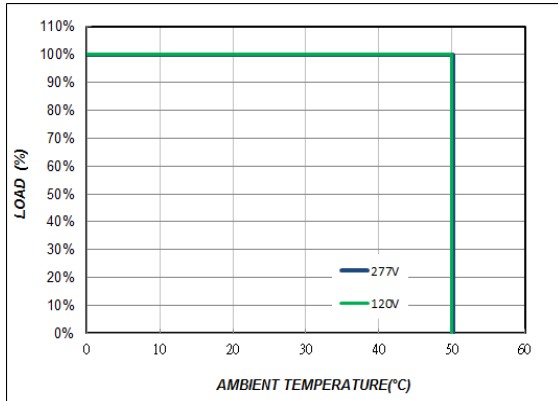
- (1) All parameters not specially mentioned are measured 230VAC input.
- (2) All specifications Typical @25°C, unless otherwise noted, at normal line and load.
- (3) Ripple and Noise measured directly at pins/terminals at nom. load, 0.1uF bypass and 47uF electrolytic, pk-pk @20MHz bandwidth.
- (4) Specified for free-air convection cooling.
- (5) Minimum load is NOT required for proper operation .

\* REFERENCE: [www.linkcom.com.tw](http://www.linkcom.com.tw)

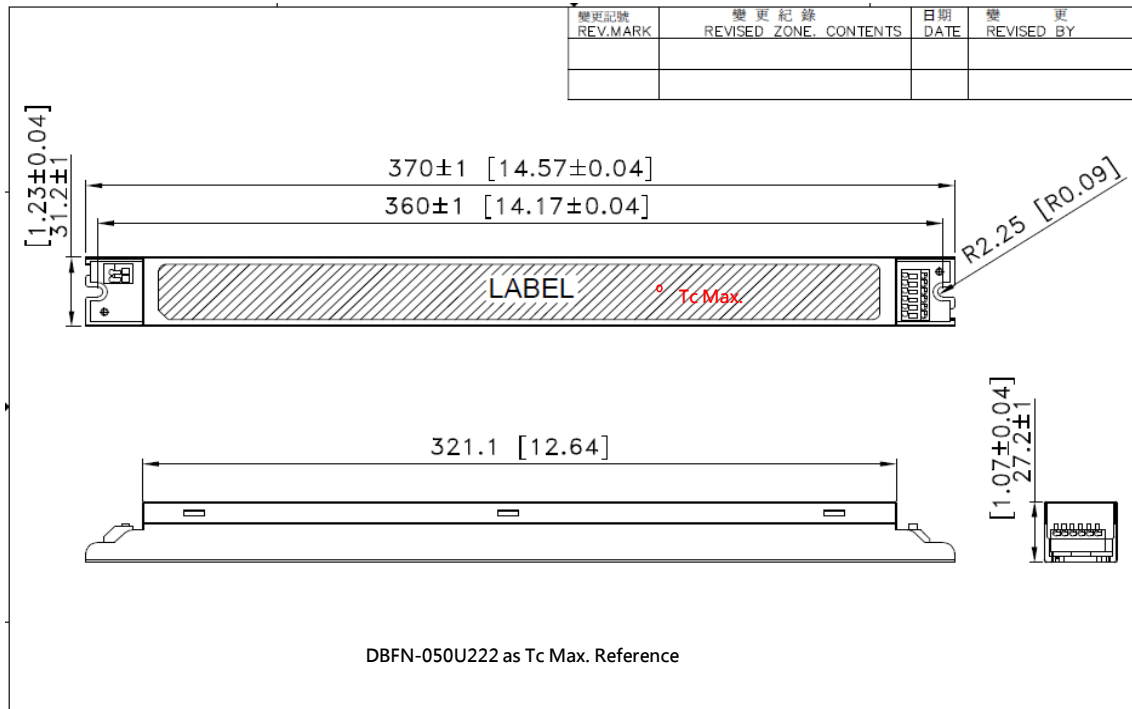
\* Please contact [sales@linkcom.com.tw](mailto:sales@linkcom.com.tw), [sales@linkcomusa.com](mailto:sales@linkcomusa.com) for more information

**DBFN Series**

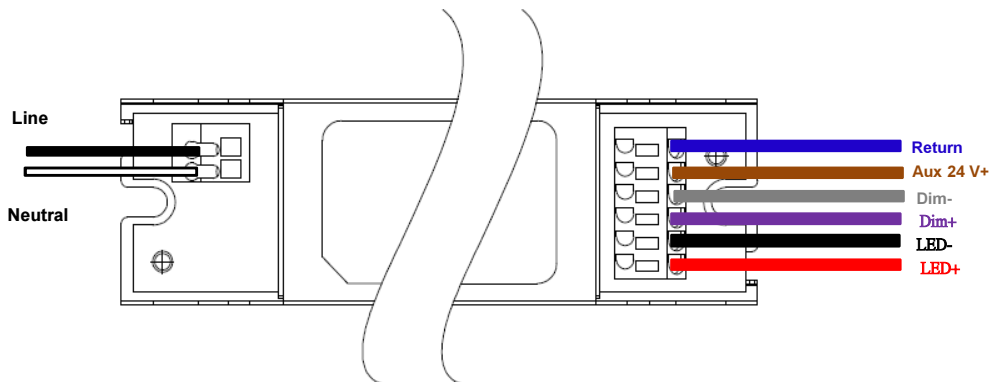
**DERATING CURVE**



**DIMENSIONS**



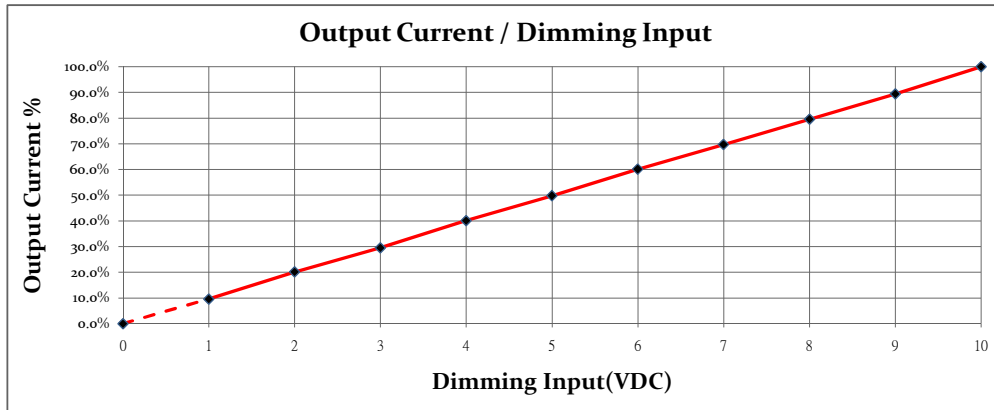
**WIRING DIAGRAM**



\* REFERENCE: [www.linkcom.com.tw](http://www.linkcom.com.tw)

**DBFN Series**
**DIMMING OPERATION**

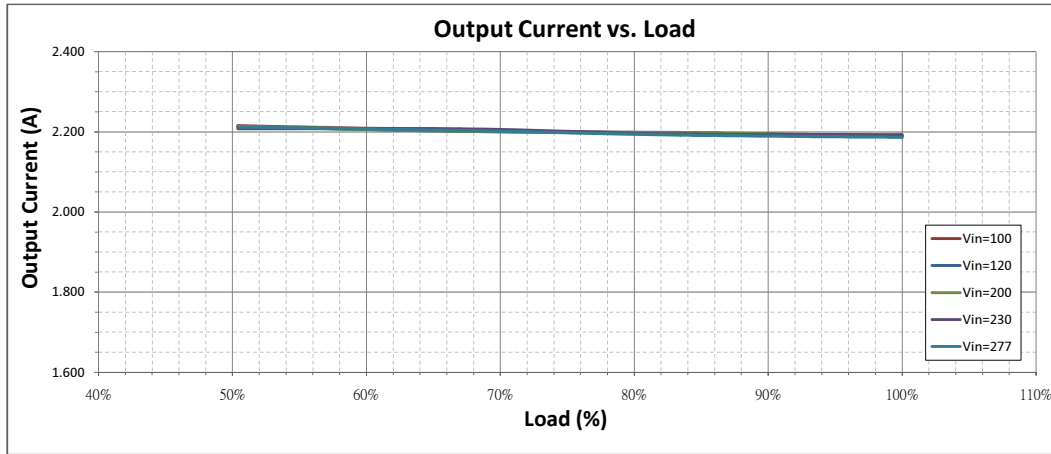
Parameters	Minimum	Typical	Maximum
Absolute maximum voltage on the Dim+	0V	—	10V
Source current on the Dim+	0mA	—	1mA


**Notes:**

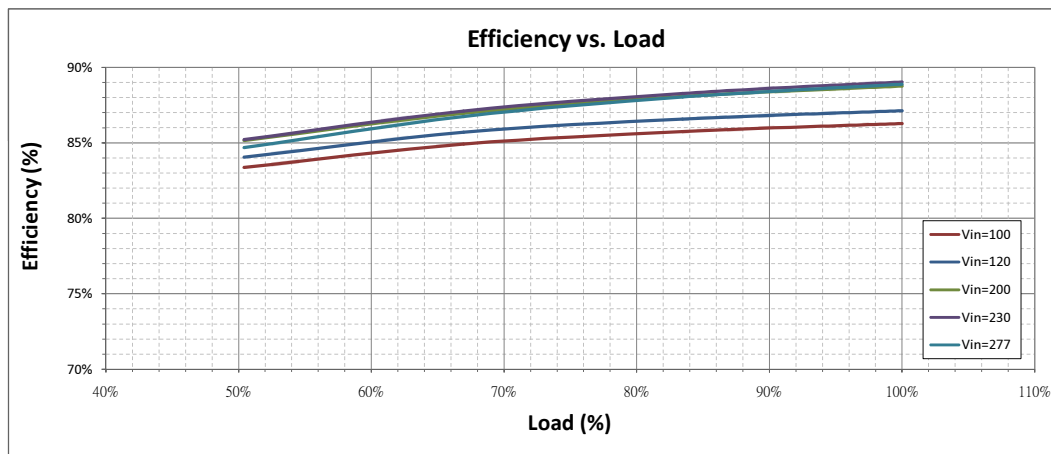
1. Purple and Gray wires on the output side are used for 1-10V dimming.
2. Recommended dimmers are Leviton IP710, Lutron NTSTV-DV or equivalent.
3. When dimming wires +Purple/-Gray are left open, the output current will be at 100%.

**DBFN Series**

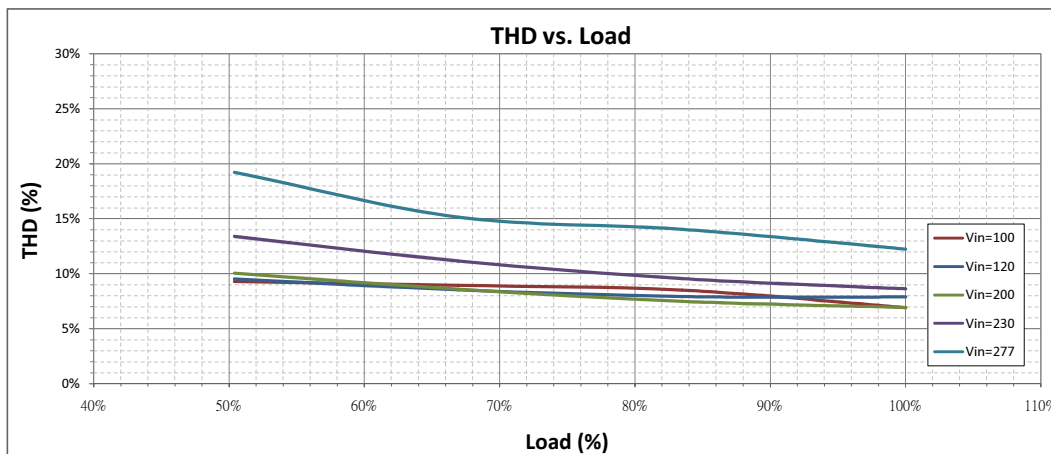
**Output Current vs. Load (DBFN-050U222)**



**Efficiency vs. Load (DBFN-050U222)**

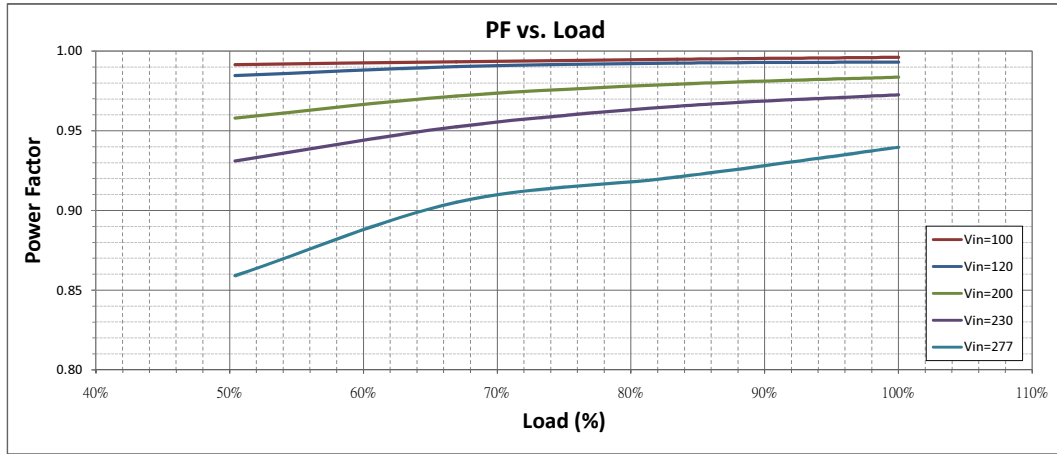


**THD vs. Load (DBFN-050U222)**



DBFN Series

PF vs. Load (DBFN-050U222)



0~10V Dimmable