



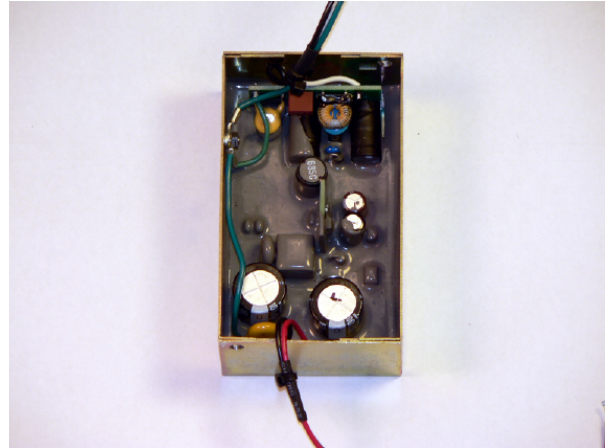
Exclara Product Brief

EXM057

14.5 Watt Dimmable LED Ballast

Product Overview

The EXM057 is a high efficiency, power factor corrected LED driver optimized in size and performance for recessed down-lighting applications. A key attribute is that it can be used with standard leading and trailing edge phase dimmers, making it suitable for all indoor lighting applications. It is among the industry's smallest design employing these features. Its Patent Pending design offers truly reliable operation with all standard dimmers with dimming resolution down to 0.2% of full scale output.



EXM057

Features	Applications
<ul style="list-style-type: none"> • Output power up to 14.5W • High efficiency: Allows for compliance with California CCR Title 24 • High Efficiency , 85% • High Power Factor – 0.99 • Dimming range 500:1 • Over-current, Over-voltage and Over-temperature protection 	<ul style="list-style-type: none"> • Recessed down-light fixtures

Application Diagram

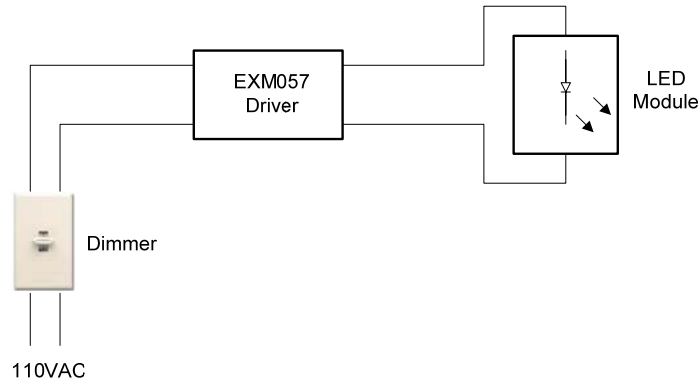


Figure 1. EXM057 Application

Ordering Information

Format: EXM057 - A - xxxxx where:

EXM057 = model number A = 120 VAC xxxxx = output code

Table 1 – Product Ordering Table

Part ID	Output Power (W)	Nominal Input Voltage (VAC)	Output Current (mA)	Output Voltage (min)	Output Voltage (max)
EXM057-A-0690	14.5		690	17.5	21

(For other output configurations contact Exclara)

Key Electrical Characteristics

(T_c = -20°C – 85°C. Typical values are at T_c = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Input voltage	V _{IN}	EXM057-A-xxxxx	110		132	VAC
Input Frequency	freq _{IN}		47		63	Hz
Power Factor	PF	V _{IN} = 120VAC at rated load	0.95	0.99		W/VA
Total Harmonic Distortion	THD	V _{IN} = 120VAC at rated load	8	10	18	%
Input Current	I _{IN}	V _{IN} = 108VAC			.2	A
Total Power output	P _{OUT}				14.5	W
Efficiency		IO at rated load, V _{IN} = 110VAC		85		%

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Output Voltage Range	V_o	At rated load current EXM057-x-0675	17.5		21	V
Output Current	I_o			690		mA

Key Environmental Characteristics

Parameter	Value
Storage Temperature	-40°C – 85°C
Temperature (Max) T_c	90°C
MTBF	747K hours @ $T_c = 45^\circ\text{C}$
Operational Life	5 years with failure rate of 3.7%, $T_c = 45^\circ\text{C}$
Humidity	5% - 95% non-condensing
Sound	Class A
Vibration	IEC 60068-2-64; IEC 60068-2-6
ROHS Compliant	Yes