EXCLARA

Exclara Product Brief

Preliminary

EXM412

10.5 Watt Dimmable LED Ballast

Product Overview

The EXM412 is a power factor corrected LED Driver optimized in size and performance for low power ballast 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 5% of full scale output.



EXM412

Features	Applications
Output power = 10.5 WEfficiency, 80%	Recessed down-light fixtures Track lighting
High Power Factor – 0.95Fits in PAR30	Under-cabinet lightingAccent Lighting



Key Electrical Characteristics

 $(Ta = -20^{\circ}C - 70^{\circ}C)$. Typical values are at $Ta = 25^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Units
Input voltage	V _{IN}		110		132	VAC
Input Frequency	freq _™		47		63	Hz
Power Factor	PF	V _{IN} = 120VAC at rated load (PF per EN6100-3-2 Class C)		0.95		W/VA
Total Harmonic Distortion	THD	V _{IN} = 120VAC at rated load (Per EN6100-3-2 Class C)	12	15	18	%
Input Current	I _{IN}	V _{IN} = =120VAC			0.160	Α
Total Power output	P _{out}				10	W
Efficiency		I _o at rated load, V _{IN} = 120VAC		80		%
Output Voltage Range	V _o	At rated load current – Adjusted at Exclara	15		21	V
Output Current ³	I _o			500		mA
Analog Dimming Resolution		% of rated output current	5		100	%

Notes:

- 1. Contact Exclara for other output current set-points.
- 2. Current regulation is guaranteed between 100VAC ~132VAC.

Key Environmental Characteristics

Parameter	Value
Storage Temperature	-40°C – 85°C
Ambient Temperature (Max) T _c	70°C
MTBF	<tbd></tbd>
Operational Life	45K hours @ 40°C
Humidity	5% - 95% non-condensing
Sound	Class A
Vibration	IEC60068-2-64; IEC60068-2-6
ROHS Compliant	Yes

copyright © 2011 Exclara