LED Light Engine, 2.5” Rectangle Module

Constant-Current DC Array
20 Nichia LEDs (5 Series x 4 Parallel Strings)
Engineered by Norlux
5 yr. Warranty

Specifications

Driver Type:	**Constant-Current**
Drive Current:	500mA Nominal
Nom. Forward Voltage:	15.5V
Total Board Power:	7.76W Nominal
Life:	50,000 Hrs, 70% lumen maint. @ Ta max 40ºC, used as specified
Max Junction Temp:	90°C
Max Test Point Temp:	85°C
Operating Temp:	-40ºC to +80ºC Ambient
Storage Temp:	-40ºC to +80ºC
Viewing Angle (FWHM):	120° Lambertian distribution
CRI:	80 Minimum

- Designed for easy use in standard luminaires
- Color: Full ANSI binning
- Customizable: Engines can be modified to your application. Contact us.

2.5 Inch Rectangle Module @ 500mA

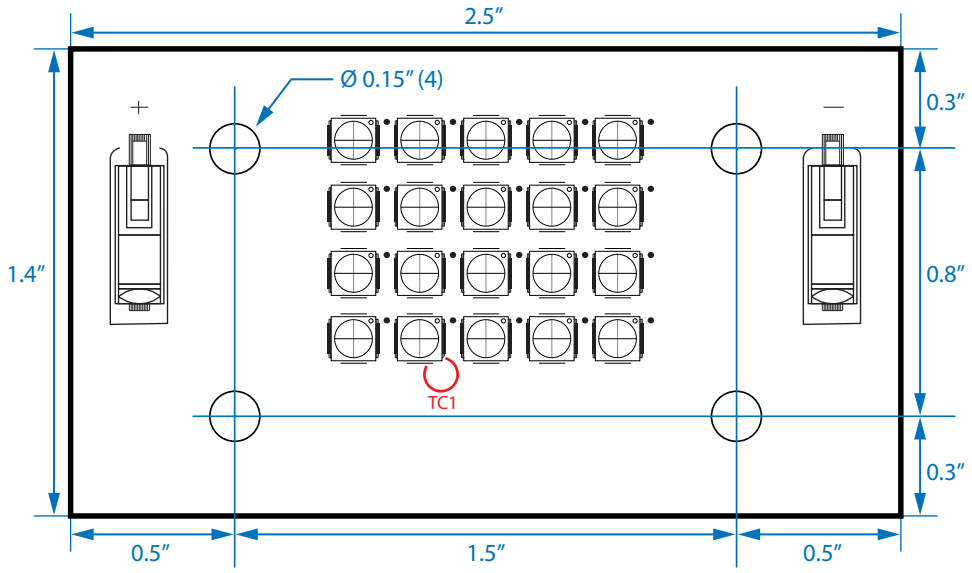
Model Number	Total Board Power *(W)*	Total Current *(mA)*	Color Temp *(K)*	Lumens *(± 15%)*	Board LPW
98034	7.76	500	2700	947	122
98035	7.76	500	3000	1,009	130
98036	7.76	500	3500	1,064	137
98037	7.76	500	4000	1,090	140
98038	7.76	500	5000	1,170	150

Connectivity Options

Suffix	Connection
-01	No Leads
-02	Push-in Connectors
-04	One 6” Red Wire (+) One One Connector (-)
-05	Two 6” Leads

For Poke-In Connectors, use
#24-18 AWG stranded or solid wire

Dimensions:



E359020

★MADE IN USA★
Of Imported And Domestic Components

Specifications subject to change without notice. Trademarks are property of their respective owners.

Rev 6-15-15

CIE Chromaticity Coordinates:

2700K
3 Step Macadams Ellipse

X	Y
0.4576	0.4183
0.4698	0.4212
0.4478	0.3999
0.4591	0.4025

3000K
3 Step Macadams Ellipse

X	Y
0.4325	0.4101
0.4452	0.4146
0.4244	0.3923
0.4362	0.3965

3500K
3 Step Macadams Ellipse

X	Y
0.4045	0.3975
0.4189	0.4044
0.3989	0.3819
0.412	0.3875

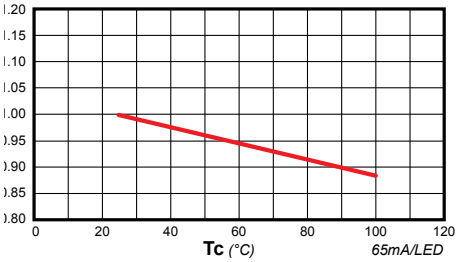
4000K
3 Step Macadams Ellipse

X	Y
0.3783	0.3836
0.3909	0.3906
0.3746	0.3687
0.3864	0.3757

5000K
3 Step Macadams Ellipse

X	Y
0.3408	0.3461
0.3485	0.3520
0.3416	0.3585
0.3499	0.3644

Relative Luminous Flux / Tc Temperature



Mounting Notes

It is important to mount the board in such a way as to maintain the Tc point below the max. The steady state thermals in application will dictate if the board needs to be mounted directly to metallic housing and/or include a thermal pad. For example fully enclosed recessed fixture will require better thermal mounting than an open air pendant.

Static Sensitive Device

Handle only at static-safe work stations.

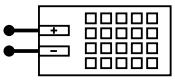
Thermal Application Notes

Heat sink required during operation. For assistance in designing proper thermal management for your application, contact TRP.

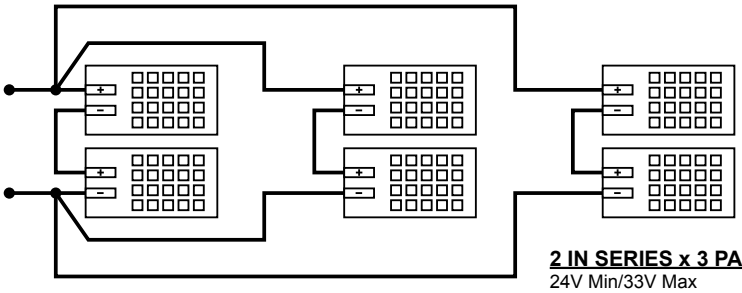
Maximum Current

Max Current: 720mA
Voltage at max current: 16.5V,
Power at max current: 11.88W
The total maximum current reflects the LED maximum forward current only, without considering thermal needs. Driving the LEDs this hard will likely violate their thermal limits, depending on the application. **Tc point must remain at or below the max temperature, or the warranty will be voided.** Temperature is directly correlated to LED current.

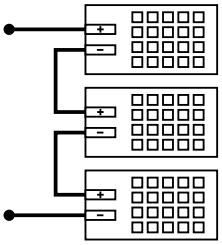
SAMPLE LED & DRIVER CONFIGURATIONS:



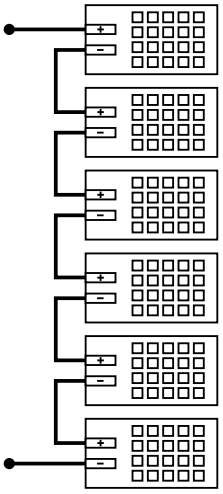
SINGLE BOARD:
2.4V Min/3.3V Max
Class 2 Operation
LED 12W-024-C0500



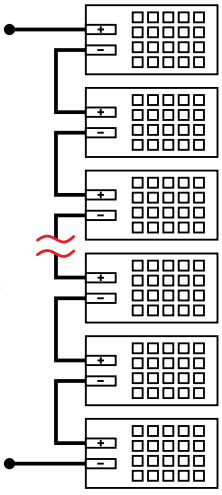
2 IN SERIES x 3 PARALLEL:
24V Min/33V Max
Class 2 Operation
LED 50W-036-C1400
LED 50W-036-C1400-D



3 IN SERIES:
36V Min/49.5V Max
Class 1 Operation
LED 25W-056-C0450
LED 25W-056-C0450-D
LED 25W-056-C0450-HL
LED 25W-056-C0450-HL-D



6 IN SERIES:
72V Min/99V Max
Class 1 Operation
LED 50W-111-C0450
LED 50W-111-C0450-D



12 IN SERIES:
144V Min/198V Max
Class 1 Operation
PLED 96W-213-C0450
PLED 96W-213-C0450-D
PLEDDC 120W-266-C0450