

## LED Module - Luminus MP-7070

Power of Luminus in standard and custom LED modules

## Data Sheet

Version 1.0

### Lean & Fast. Made Smarter.

**Design Faster** – use standard modules to shorten development time

**Superior Performance** – stay current with the top flux bin LEDs

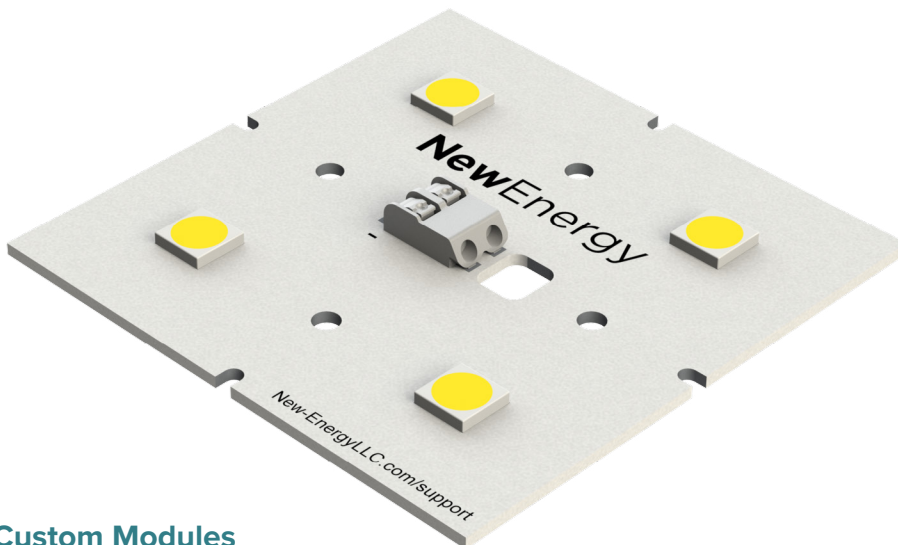
**Maximum Flexibility** – use off-the-shelf optics and drivers

**Innovation** – work with NewEnergy on your custom solution

### Primary Applications



Horticulture  
High Mast  
Streetlight  
Stadium  
Architectural  
Canopy  
Garage  
Portable  
High bay



### Superior Performance in Standard & Custom Modules

- Metal core PCB for optimal thermal management
- Configurable with off-the-shelf optics
- Custom Thermal Pad available upon request
- Conformal Coating available upon request
- Talk to NewEnergy about your custom or private label designs

### Simplify Your Next Design

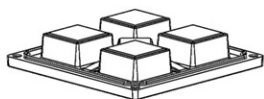
The Luminus MP-7070 modules are an off-the-shelf platform to rapidly move from prototype to finished LED lighting fixture. These competitively priced modules come in a range of lumen outputs.

### Custom Solutions

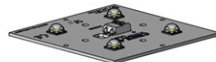
Our North Carolina based office provides quick engineering & sales support with a R&D lab for prototype development and custom solutions. We offer global manufacturing capabilities in the United States as well as overseas at scale.

### About NewEnergy

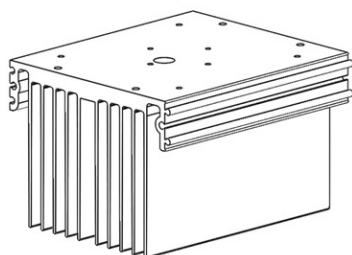
NewEnergy accelerates the adoption of LED technology through simple, modular products and custom designs. NewEnergy offers leading solid state lighting components, modules and custom solutions. NewEnergy customers get to market faster, with less resources, at lower costs. Visit [New-EnergyLLC.com](http://New-EnergyLLC.com) for more information.



- Standard Off-The-Shelf Optics Available



- NewEnergy LED Module



- NewEnergy Heat Sink.

# MP-7070 Series Specifications

## Product Selection Table

Configuration	LED Layout	Part Number	CCT	CRI	Luminous Flux (lm)		Efficacy (lm/W) Typ.	Watts (W) Typ.
					Min	Typ.		
Square <sup>(1)</sup>	2x2	LVS1-04G12-2770-00	2700K	70	4800	5520	164	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-2780-00	2700K	80	4800	5280	157	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-3070-00	3000K	70	5200	5800	173	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-3080-00	3000K	80	4800	5520	164	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-4070-00	4000K	70	5600	6040	180	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-4080-00	4000K	80	5200	5720	170	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-5070-00	5000K	70	5600	6040	180	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-5080-00	5000K	80	5200	5720	170	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-5770-00	5700K	70	5600	6040	180	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-5780-00	5700K	80	5200	5720	170	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-6570-00	6500K	70	5600	6040	180	33.6
Square <sup>(1)</sup>	2x2	LVS1-04G12-6580-00	6500K	80	5200	5720	170	33.6

<sup>(1)</sup> Nominal product performance at 700mA Tc = 25°C.

<sup>(2)</sup> LED order codes specify only a minimum flux bin and not a maximum. NewEnergy may ship modules in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity bin restrictions specified by the order code.

## Order Code Formatting

Series	-	LED Count	LED Code	-	Color Temperature	Color Rendering Index	-	Internal Code
LVS1 - High Power Array LED PCB Assembly, Square		04 - 4 LEDs	G12 - Luminus MP-7070		27 - 2700K	70 - 70 CRI		XX
					30 - 3000K	80 - 80 CRI		
					40 - 4000K			
					50 - 5000K			
					57 - 5700K			
					65 - 6500K			

# MP-7070 Series Specifications

## Electrical Characteristics

Part Number	Typ. Forward Current (mA)	Forward Voltage (V)		Typical Thermal Resistance - Junction to Solder Point (K/W) RTh J-HS
		Min	Typical	
LVS1-04x	700	44	48	1.8

Intended for connection to a class 2 power source with a maximum operating voltage of 50 Vdc

## Maximum Ratings

Part Number	Forward Voltage (V)	DC Current (mA)	Tsp Temp (°C)	Power (W)
LVS1-04x	56	1200	105	67.2

<sup>(1)</sup> Input power not to exceed 100W for UL Class 2. Suitability for usage in other than Class 2 circuits shall be determined in the end-product investigation.

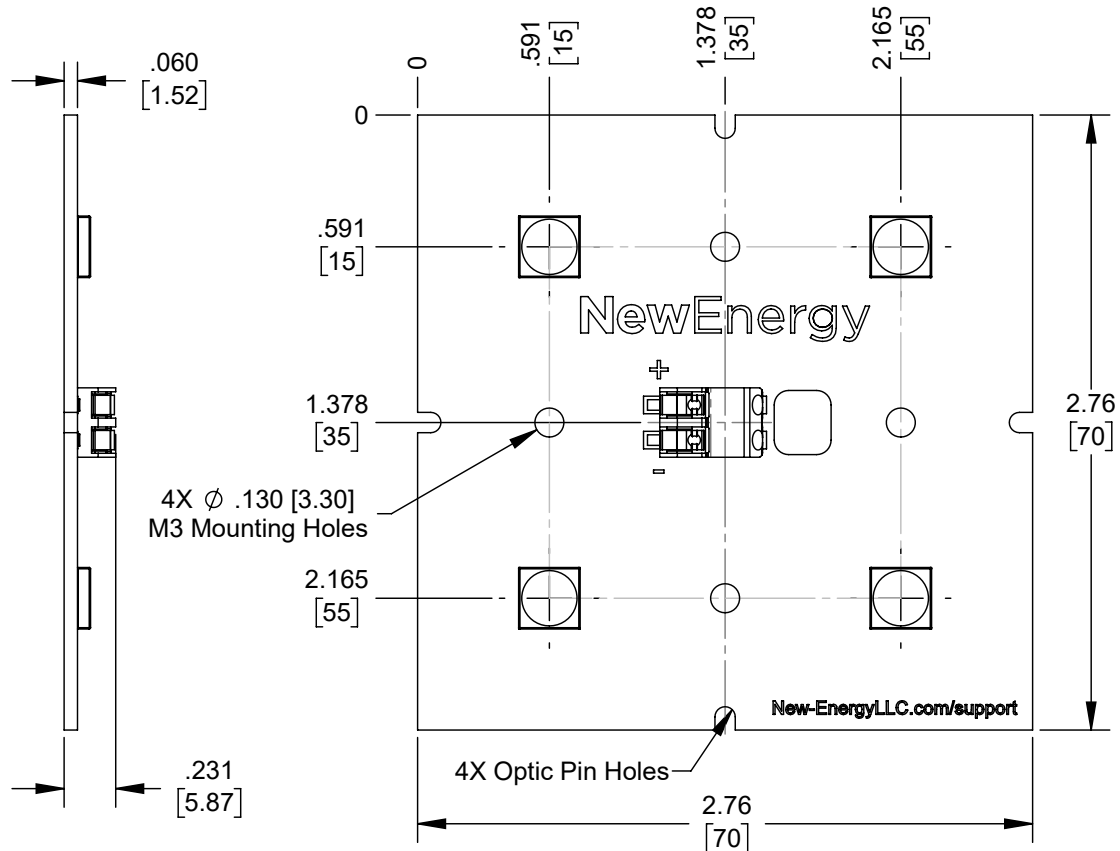
## Board Material Properties

Property	Value	Unit
Solder Mask Color	White	-
Thickness	.062	in
Construction	AL	-
Temperature	130	°C
Flame Rating	V-0	-
Copper Thickness	2	oz

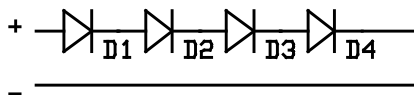
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## Mechanical Dimensions

Units: Inches [MM]



## Schematic



1. Dual Poke-In Connectors accept 18-24 AWG solid or stranded wire
2. Recommended Mounting Hardware: 4x M3-5 Socket Head Cap Screws