# LED Heat Sinks

PADLED Heat Sink

Wakefield- Vette's PADLED is designed with 99.7% high-purity aluminum cold forging process. The design of the series is simple and gorgeous, and the blade is rectangular in a radial patern, which makes the convection heat dissipation reasonable. This heat sink also has 4 PCS holes on top. This i compatible with Light Modules such as Edison, Xicato, Bridgelux, Osram, Lumileds, Cree, Tridonic, LG, Lustrous, Prolight, Samsung, SHARP, Luminus and Philips.
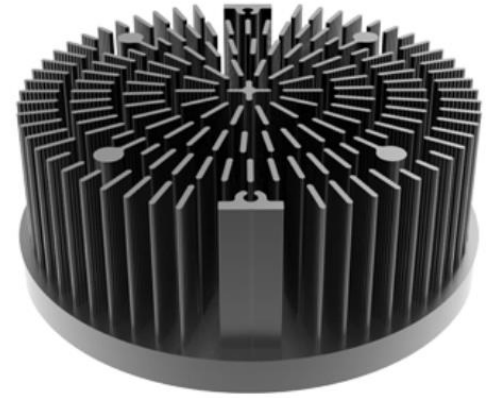
Features:

- Mechanical compatibility with direct mounting of the LED modules to the LED cooler and thermal performance matching the lumen packages
- Side fins to be frilled M3 or M4 Hotles
- Several Diameters, Several Standard heights
- Forged from highly conductive aluminum
- Black Anodized
- Blank surface with no holes to mount any device listed below

Compatible with:

- Bridelux: Vero 18/22 Vero SE 18/29 LED engines;
- Cree: XLamp CXA 25xx, Xlamp CXB 25xx, CXA 30xx, Xlamp CXB 30xx LED en
- Citizen: CLU036, CLU038, CLU721, CLU711, CLU046, CLU048, CLU731 LED engines;
- Edison: EdiLex III COB LED engines;
- GE lighting: Infusion™ LED engines;
- LG Innotek: 32W, 42W, 56W LED engines;
- LumiLEDS: LUXEON 1211, LUXEON 1216, LUXEON 1812, LUXEON 1825 LED eng
- Lumens: Ergon-COB-2530, 2540, 3050, 3070 LED engines;
- Luminus: CXM-18, CLM-22, CXM-22 LED engines;
- Nichia: NFCWL036B, NFCLL036B, NFCWL060B, NFCLL060B LED engines;
- Osram: SOLERIQ® S 19, Core series LED engines;
- Philips: Fortimo SLM LED engines;
- Prolight Opto: PABS, PABA, PACB, PANA LED engines;
- Samsung: LC026B, LC033B, LC040B, LC040D, LC060D, LC080D LED engines;
- Seoul Semiconductor: Acrich MJT COBs, DC COB LED engines;
- Tridonic: SLE G6 19mm, SLE G6 23mm LED engines;
- Vossloh-Schwabe: LUGA Shop and LUGA C LED engines;
- Xicato: XSM, XIM, XTM LED engines;
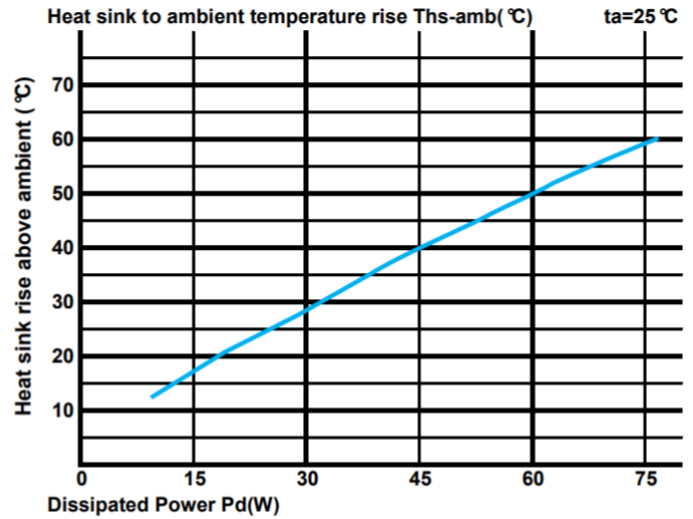
PADED Heat Sink

130mm Diameter

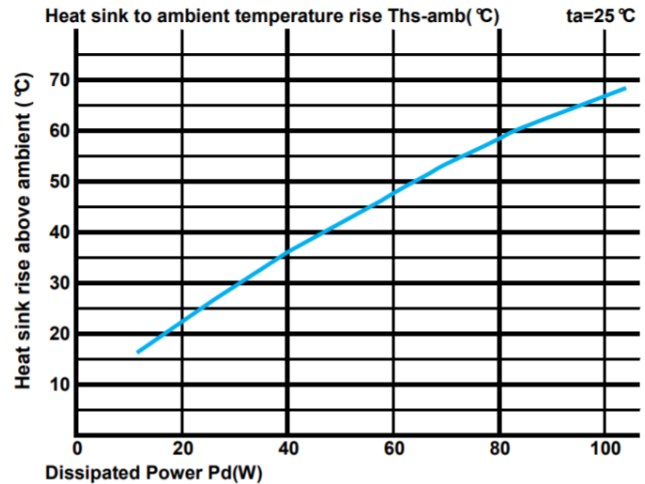| WKV Part Number	Description	Height (mm)	Diameter (mm)	Max. Lumen (lm)	Dissipated Power (W)	Thermal Resistance (°C/W)	Weight (g)
PADLED-13080	PAD LED Heat Sink 130MM DIA 80H	80	130	4600	33	1.5	492
PADLED-130100	PAD LED Heat Sink 130MM DIA 100H	100	130	6700	48	1	625

<u>*Note: All Bases Have no Holes</u>

Thermal Data PADLED-13080

$Pd = Pe \times (1-\eta L)$	Heat sink to ambient thermal resistance Rhs-amb (°C/W)	Heat sink to ambient temperature rise Ths-amb (°C)
15.0	1.13	17.0
30.0	0.93	28.0
45.0	0.89	40.0
60.0	0.83	50.0
75.0	0.77	58.0

Heat sink to ambient temperature rise Ths-amb(°C)   ta=25°C

Thermal Data PADLED-130100

$Pd = Pe \times (1-\eta L)$	Heat sink to ambient thermal resistance Rhs-amb (°C/W)	Heat sink to ambient temperature rise Ths-amb (°C)
20.0	1.10	22.0
40.0	0.90	36.0
60.0	0.78	47.0
80.0	0.73	58.0
100.0	0.66	66.0

Heat sink to ambient temperature rise Ths-amb(°C)   ta=25°C

WKV Part Number	Description	Height (mm)	Diameter (mm)	Max. Lumen (lm)	Dissipated Power (W)	Thermal Resistance (°C/W)	Weight (g)
PADLED-16580	PAD LED Heat Sink 165MM DIA 80H	80	165	15000	95	0.52	1550
PADLED-165100	PAD LED Heat Sink 165MM DIA 100H	100	165	16800	120	0.4	1700

*Note: All Bases Have no Holes
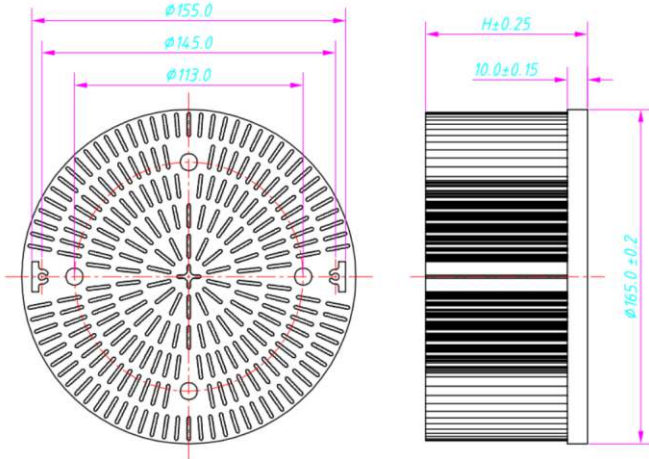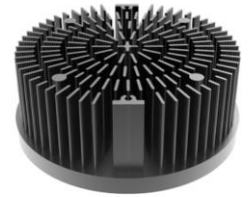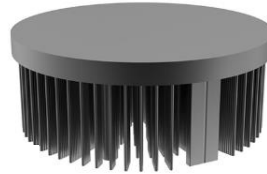
Thermal Data PADLED-16580

Pd = Pe x (1-ηL) Dissipated Power Pd(W)	Heat sink to ambient thermal resistance Rhs-amb (°C/W)	Heat sink to ambient temperature rise Ths-amb (°C)
30.0	0.78	23.5
60.0	0.63	38.0
90.0	0.52	47.0
120.0	0.51	61.0
150.0	0.49	73.0

Heat sink to ambient temperature rise Ths-amb(°C)   ta=25°C

Thermal Data PADLED-165100

Pd = Pe x (1-ηL) Dissipated Power Pd(W)	Heat sink to ambient thermal resistance Rhs-amb (°C/W)	Heat sink to ambient temperature rise Ths-amb (°C)
30.0	0.60	18.0
60.0	0.48	29.0
90.0	0.44	40.0
120.0	0.42	50.0
150.0	0.41	61.0

Heat sink to ambient temperature rise Ths-amb(°C)   ta=25°C
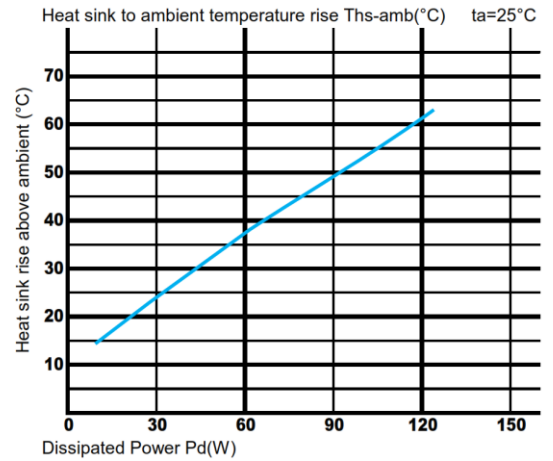
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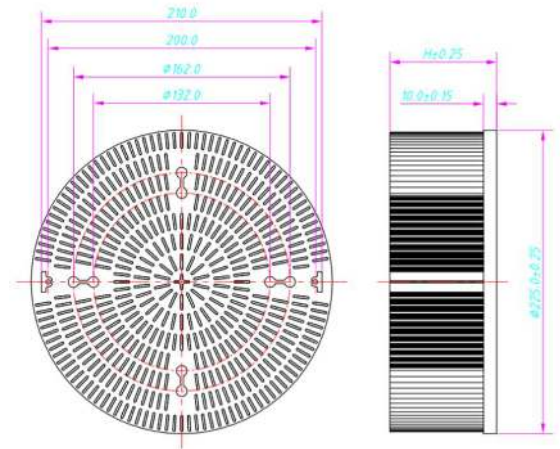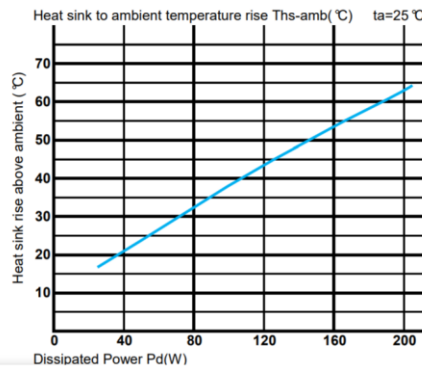| WKV Part Number	Description	Height (mm)	Diameter (mm)	Max. Lumen (lm)	Dissipated Power (W)	Thermal Resistance (°C/W)	Weight (g)
PADLED-22560	PAD LED Heat Sink 225MM DIA 60H	60	225	21000	150	0.3	2220
PADLED-225100	PAD LED Heat Sink 225MM DIA 100H	100	225	28000	200	0.2	3150

<u>*Note: All Bases Have no Holes</u>

<u>Thermal Data PADLED-22560</u>

Pd = Pe x (1-ηL)	Heat sink to ambient thermal resistance Rhs-amb (°C/W)	Heat sink to ambient temperature rise Ths-amb (°C)
40.0	0.53	21.0
80.0	0.41	33.0
120.0	0.37	44.0
160.0	0.33	53.0
200.0	0.32	63.0

Heat sink to ambient temperature rise Ths-amb(°C)   ta=25°C

<u>Thermal Data PADLED-225100</u>

Pd = Pe x (1-ηL)	Heat sink to ambient thermal resistance Rhs-amb (°C/W)	Heat sink to ambient temperature rise Ths-amb (°C)
50.0	0.40	20.0
100.0	0.32	32.0
150.0	0.29	43.0
200.0	0.26	52.0
250.0	0.24	61.0

Heat sink to ambient temperature rise Ths-amb(°C)   ta=25°C