

LPD Series

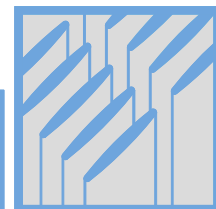
Low Pressure Drop Heat Sink

ALPHA

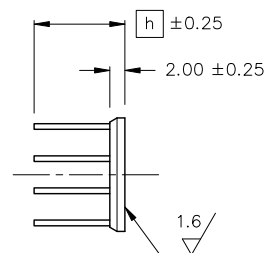
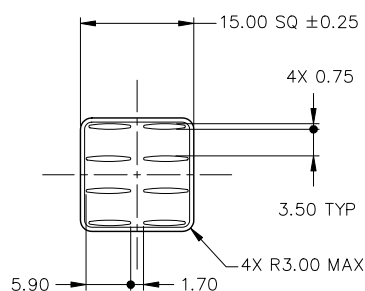
ALPHA

Low Pressure Drop Heat Sink

LPD15



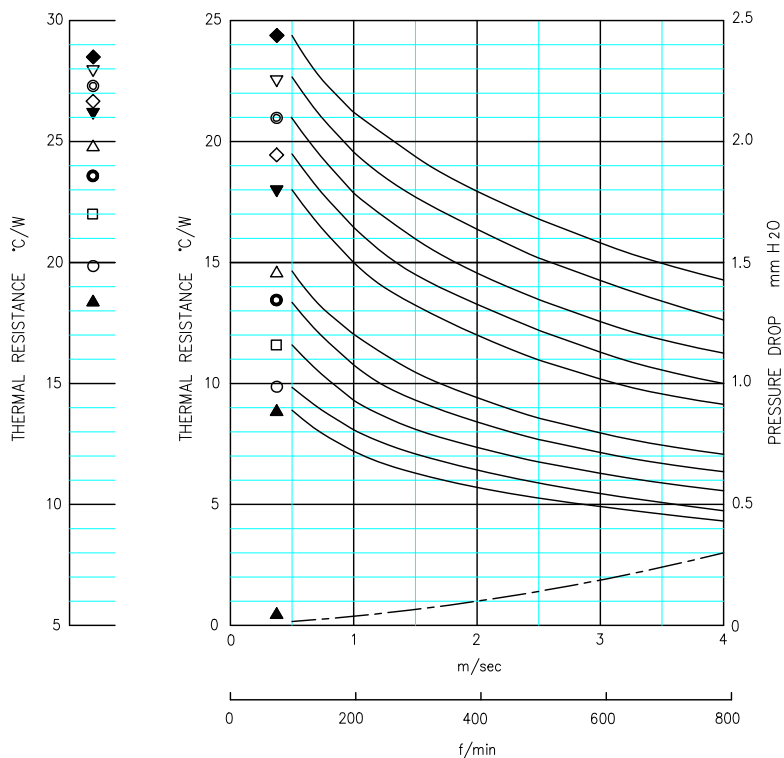
DIM



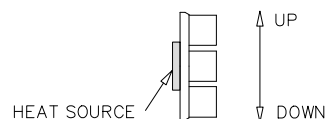
MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD15-3B	3	1.2
LPD15-4B	4	1.3
LPD15-5B	5	1.4
LPD15-6B	6	1.5
LPD15-7B	7	1.6
LPD15-10B	10	1.8
LPD15-12B	12	1.9
LPD15-15B	15	2.2
LPD15-20B	20	2.5
LPD15-25B	25	2.9

DATA



- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 1.85 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

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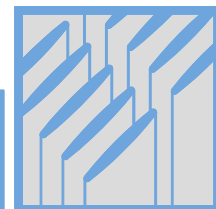
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

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FAX +1(408)567-8053
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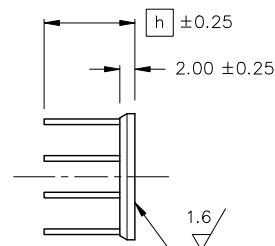
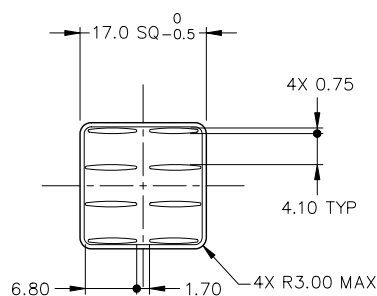
ALPHA

Low Pressure Drop Heat Sink

LPD17



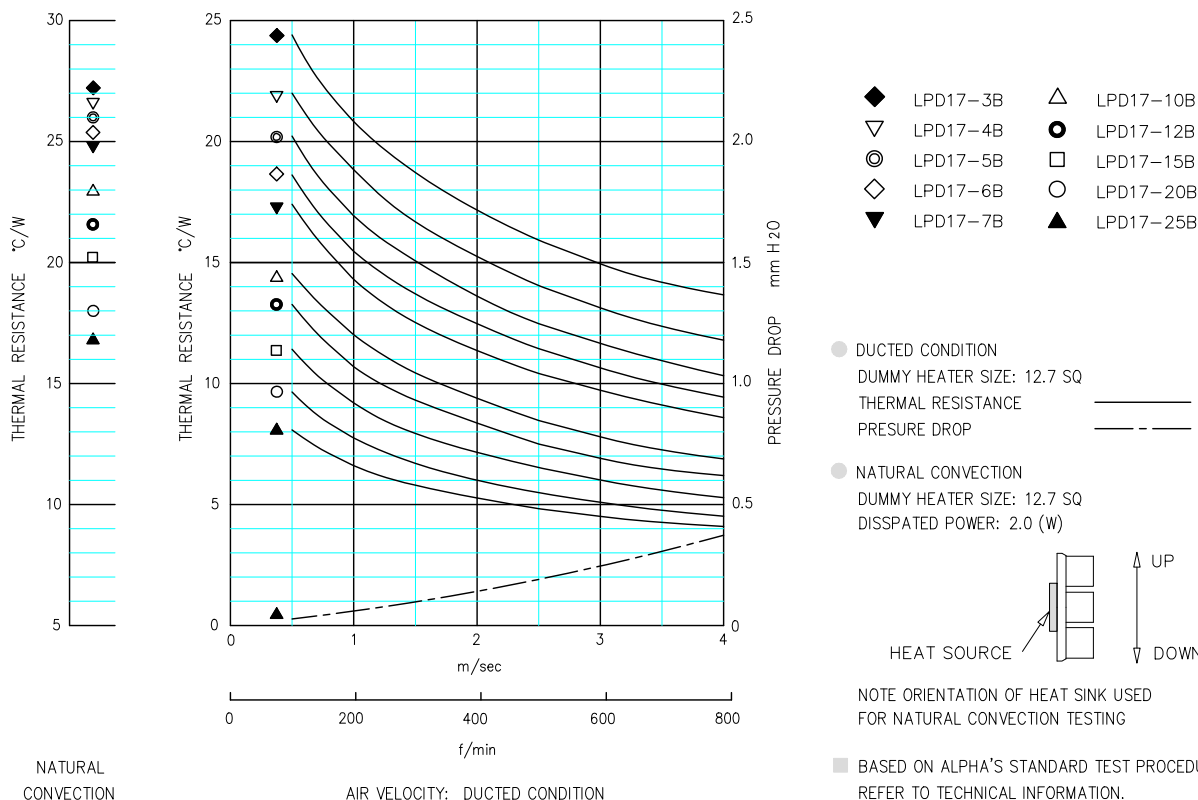
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD17-3B	3	1.5
LPD17-4B	4	1.6
LPD17-5B	5	1.7
LPD17-6B	6	1.8
LPD17-7B	7	1.9
LPD17-10B	10	2.2
LPD17-12B	12	2.3
LPD17-15B	15	2.6
LPD17-20B	20	3.0
LPD17-25B	25	3.5

DATA



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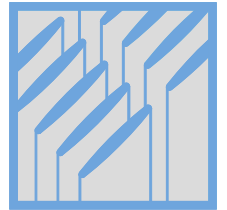
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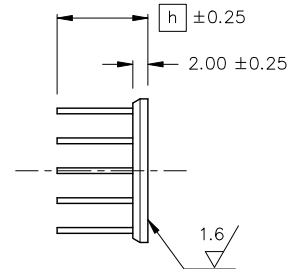
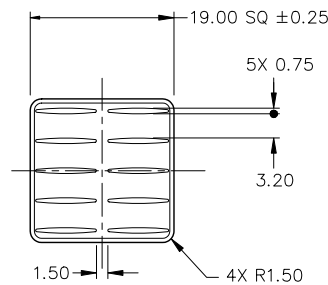
ALPHA

Low Pressure Drop Heat Sink

LPD19



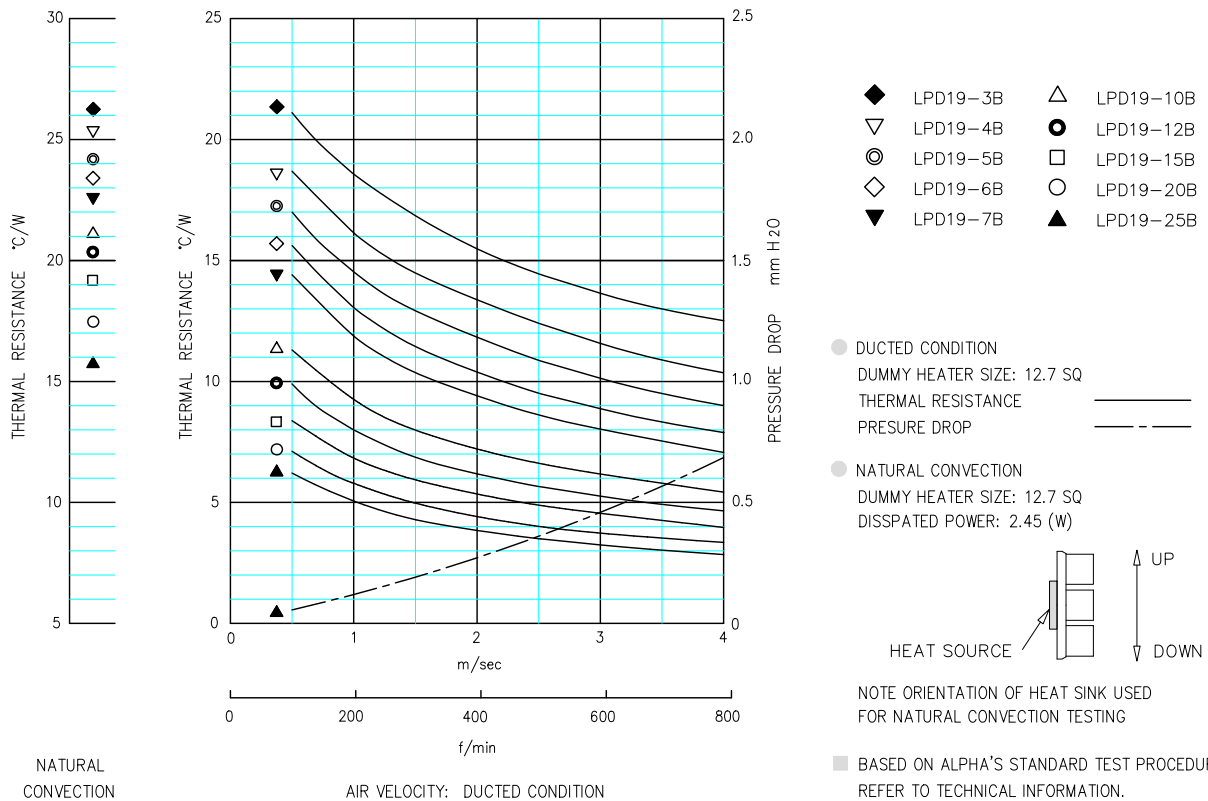
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD19-3B	3	2.0
LPD19-4B	4	2.1
LPD19-5B	5	2.3
LPD19-6B	6	2.4
LPD19-7B	7	2.5
LPD19-10B	10	2.9
LPD19-12B	12	3.2
LPD19-15B	15	3.6
LPD19-20B	20	4.3
LPD19-25B	25	5.0

DATA



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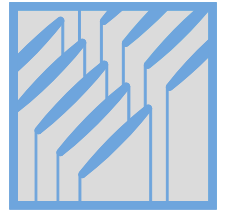
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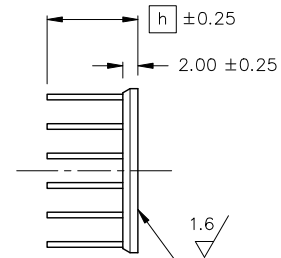
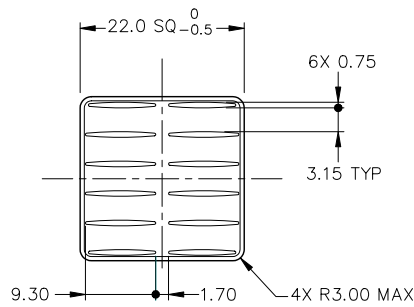
ALPHA

Low Pressure Drop Heat Sink

LPD22



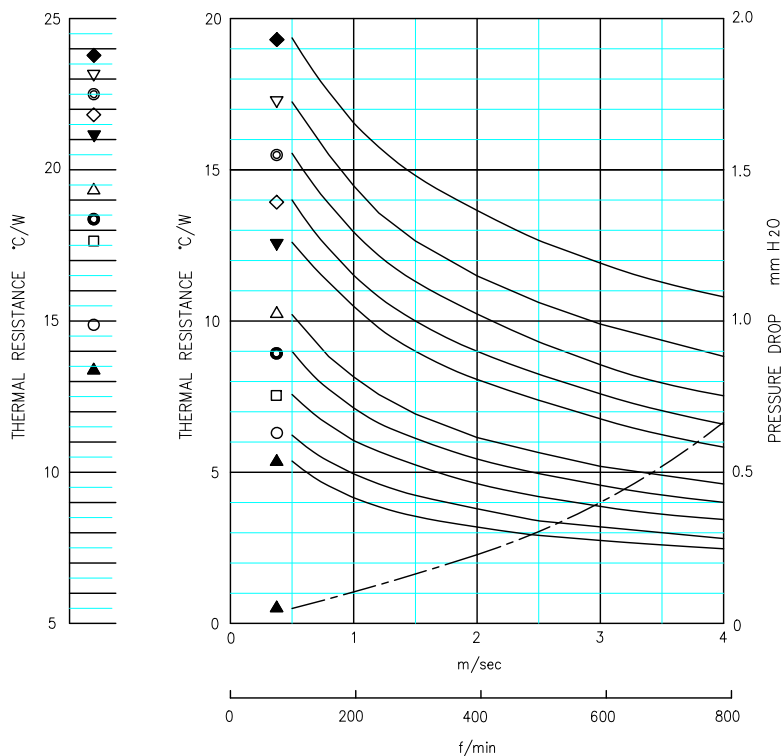
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD22-3B	3	2.7
LPD22-4B	4	2.9
LPD22-5B	5	3.1
LPD22-6B	6	3.3
LPD22-7B	7	3.5
LPD22-10B	10	4.0
LPD22-12B	12	4.4
LPD22-15B	15	4.9
LPD22-20B	20	5.8
LPD22-25B	25	6.8

DATA

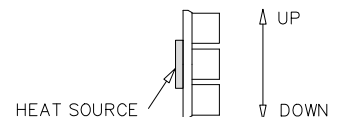


NATURAL
CONVECTION

AIR VELOCITY: DUCTED CONDITION

- ◆ LPD22-3B
- ▽ LPD22-4B
- LPD22-5B
- ◇ LPD22-6B
- ▼ LPD22-7B
- △ LPD22-10B
- LPD22-12B
- LPD22-15B
- LPD22-20B
- ▲ LPD22-25B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 2.5 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

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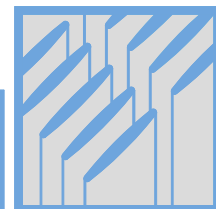
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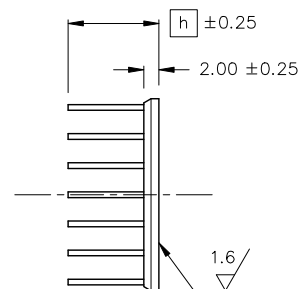
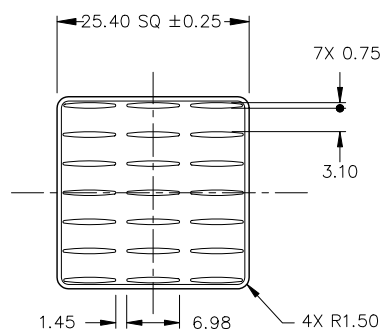
ALPHA

Low Pressure Drop Heat Sink

LPD25



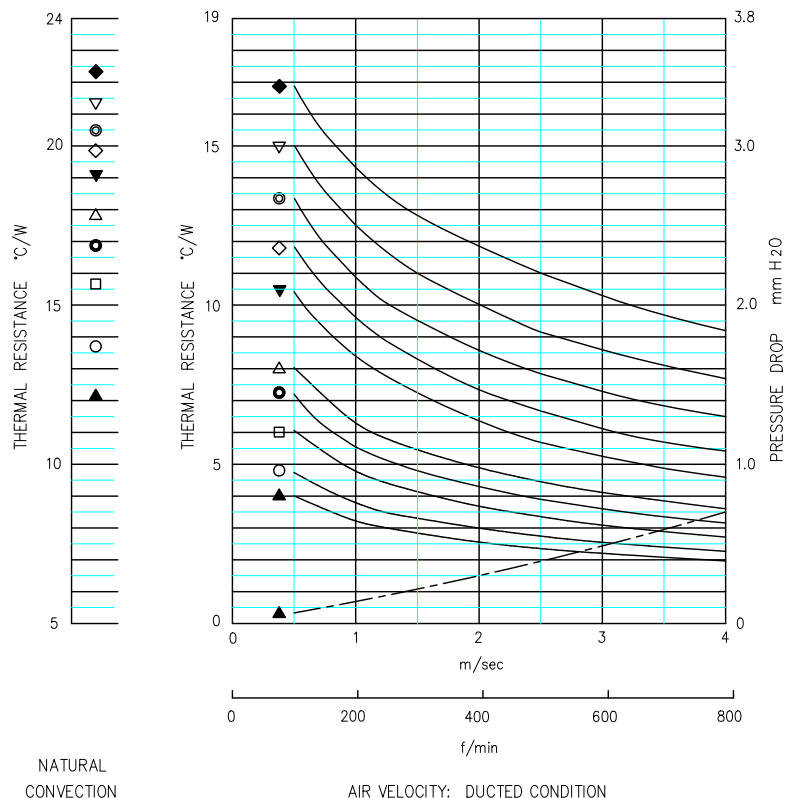
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

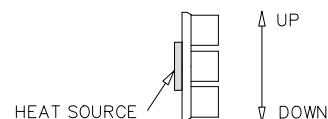
MODEL	HEIGHT [h]	WEIGHT (grams)
LPD25-3B	3	4.1
LPD25-4B	4	4.3
LPD25-5B	5	4.5
LPD25-6B	6	4.7
LPD25-7B	7	4.9
LPD25-10B	10	5.5
LPD25-12B	12	5.9
LPD25-15B	15	6.5
LPD25-20B	20	7.5
LPD25-25B	25	8.5

DATA



- ◆ LPD25-3B
- ▽ LPD25-4B
- ⊙ LPD25-5B
- ◇ LPD25-6B
- ▼ LPD25-7B
- △ LPD25-10B
- LPD25-12B
- LPD25-15B
- LPD25-20B
- ▲ LPD25-25B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 3.15 (W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

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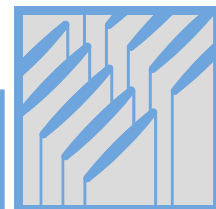
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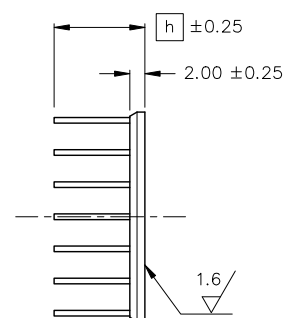
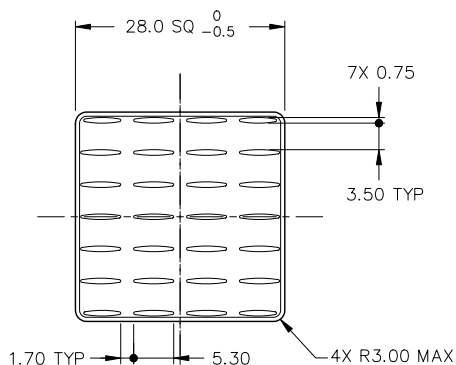
ALPHA

Low Pressure Drop Heat Sink

LPD28



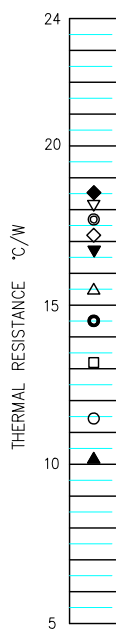
DIM



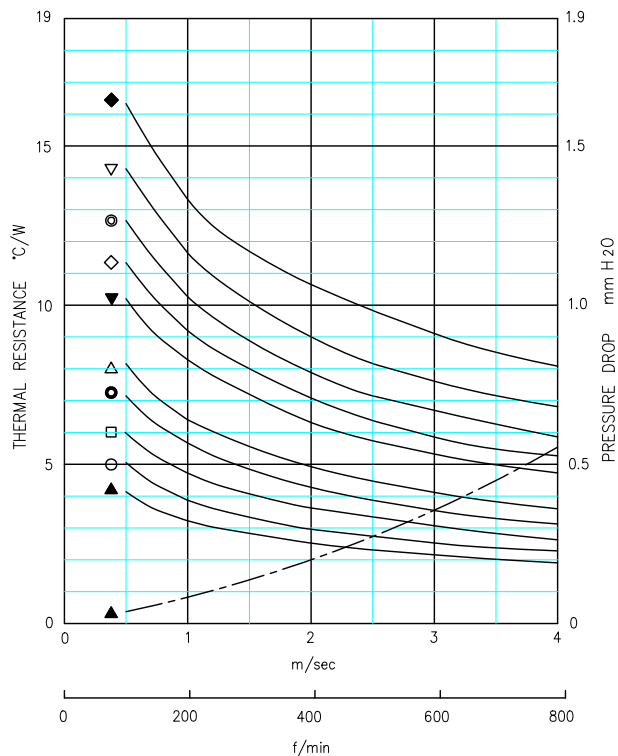
MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD28-3B	3	4.1
LPD28-4B	4	4.3
LPD28-5B	5	4.6
LPD28-6B	6	4.8
LPD28-7B	7	5.0
LPD28-10B	10	5.8
LPD28-12B	12	6.2
LPD28-15B	15	7.0
LPD28-20B	20	8.2
LPD28-25B	25	9.4

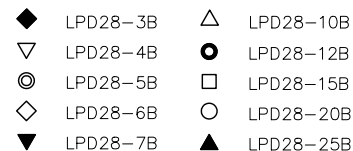
DATA



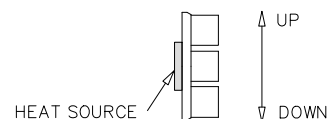
NATURAL
CONVECTION



AIR VELOCITY: DUCTED CONDITION



- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 3.25 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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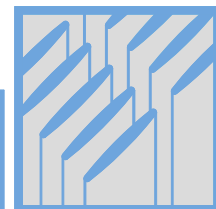
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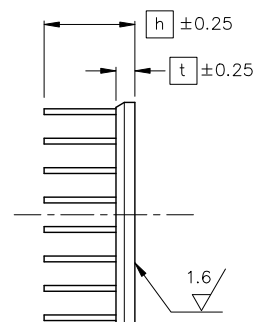
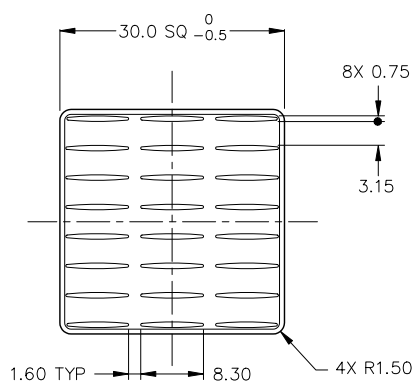
ALPHA

Low Pressure Drop Heat Sink

LPD30



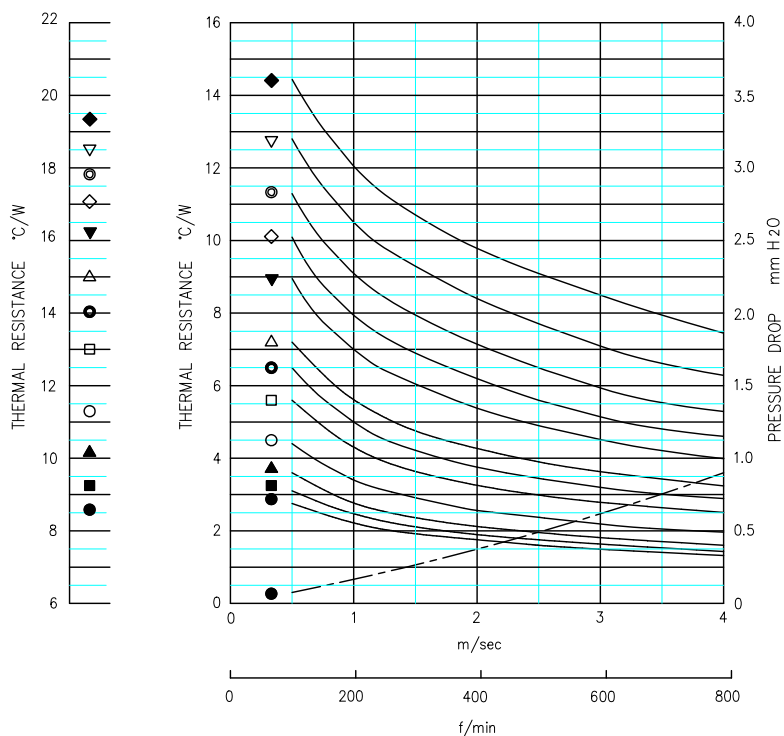
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD30-3B	3	2.00	5.1
LPD30-4B	4		5.5
LPD30-5B	5		5.8
LPD30-6B	6		6.2
LPD30-7B	7		6.5
LPD30-10B	10	2.50	8.3
LPD30-12B	12		8.9
LPD30-15B	15		9.8
LPD30-20B	20		11.3
LPD30-25B	25		12.8
LPD30-30B	30		14.4
LPD30-35B	35		15.9
LPD30-[h]B	[h] ≤ 7	2.00	-
	7 < [h] ≤ 35	2.50	-

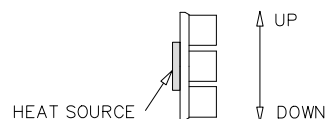
DATA



- ◆ LPD30-3B
- ▽ LPD30-4B
- ⊙ LPD30-5B
- ◇ LPD30-6B
- ▼ LPD30-7B
- △ LPD30-10B
- LPD30-12B
- LPD30-15B
- LPD30-20B
- ▲ LPD30-25B
- LPD30-30B
- LPD30-35B

● DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP

● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 3.9 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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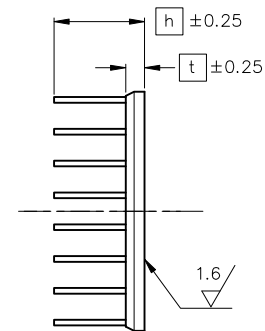
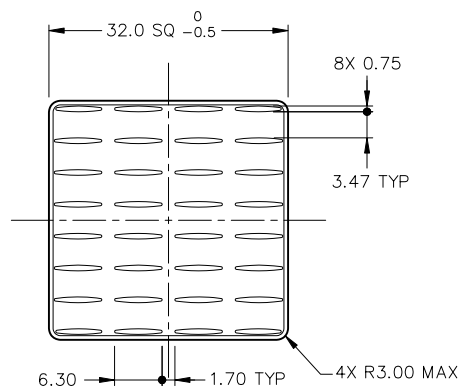
ALPHA

Low Pressure Drop Heat Sink

LPD32



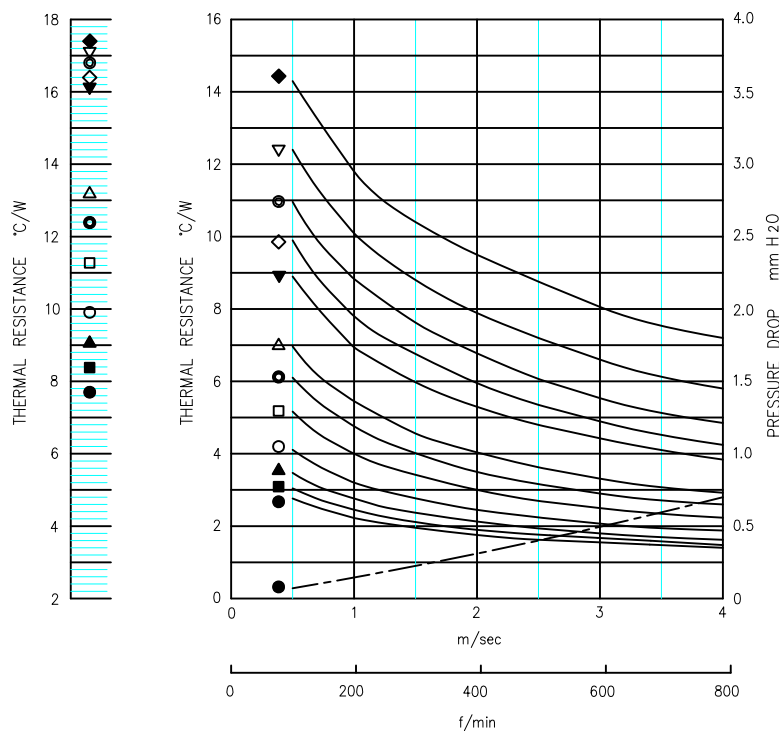
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD32-3B	3	2.00	5.7
LPD32-4B	4		6.0
LPD32-5B	5		6.3
LPD32-6B	6		6.6
LPD32-7B	7		7.0
LPD32-10B	10	2.50	9.2
LPD32-12B	12		9.8
LPD32-15B	15		10.8
LPD32-20B	20		12.4
LPD32-25B	25		14.1
LPD32-30B	30		15.7
LPD32-35B	35		17.3
LPD32-[h]B	[h] ≤ 7	2.00	-
	7 < [h] ≤ 35	2.50	-

DATA

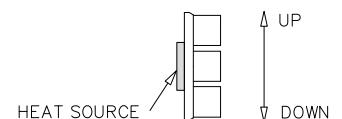


NATURAL
CONVECTION

AIR VELOCITY: DUCTED CONDITION

- ◆ LPD32-3B
- ▽ LPD32-4B
- ⊙ LPD32-5B
- ◇ LPD32-6B
- ▼ LPD32-7B
- △ LPD32-10B
- LPD32-12B
- LPD32-15B
- LPD32-20B
- ▲ LPD32-25B
- LPD32-30B
- LPD32-35B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE ———
PRESSURE DROP - - -
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSPATED POWER:
LPD32-3B ~ -7B = 2.0(W)
LPD32-10B ~ -35B = 3.7(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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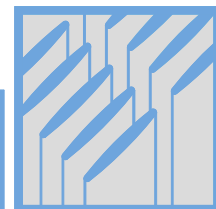
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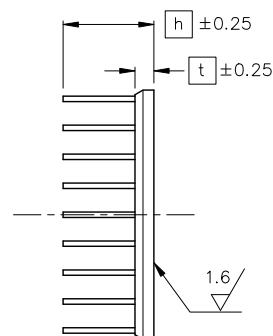
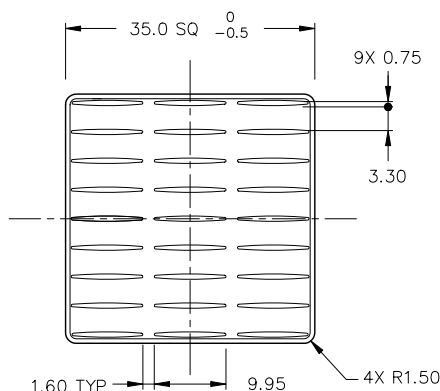
ALPHA

Low Pressure Drop Heat Sink

LPD35



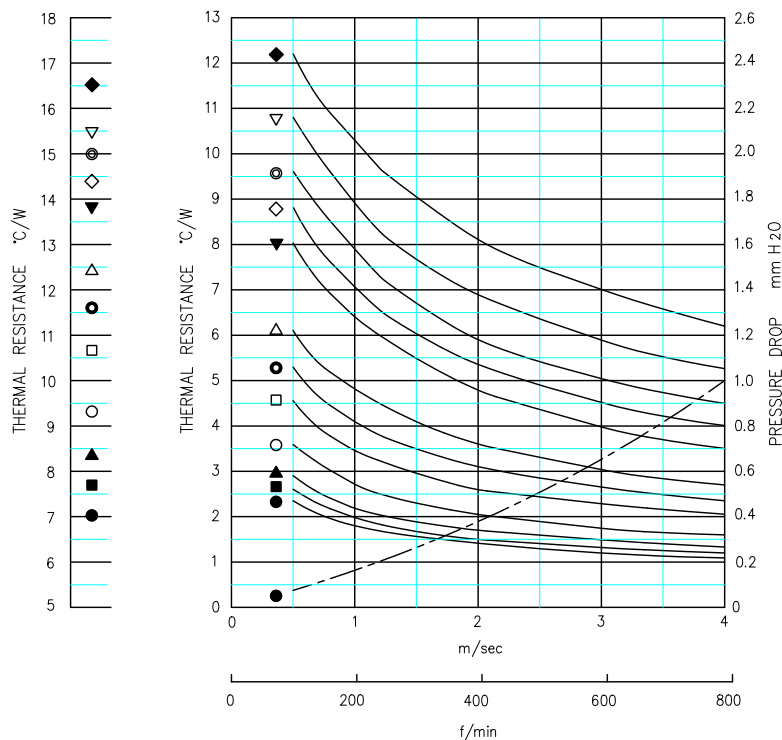
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

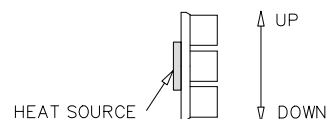
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD35-3B	3	2.00	7.2
LPD35-4B	4		7.6
LPD35-5B	5		8.1
LPD35-6B	6		8.5
LPD35-7B	7		8.9
LPD35-10B	10	3.00	12.8
LPD35-12B	12		13.6
LPD35-15B	15		14.9
LPD35-20B	20		17.1
LPD35-25B	25		19.2
LPD35-30B	30		21.3
LPD35-35B	35		23.5
LPD35-[h]B	[h] ≤ 7	2.00	-
	7 < [h] ≤ 35	3.00	-

DATA



- ◆ LPD35-3B
- ▽ LPD35-4B
- ⊙ LPD35-5B
- ◊ LPD35-6B
- ▼ LPD35-7B
- △ LPD35-10B
- LPD35-12B
- LPD35-15B
- LPD35-20B
- ▲ LPD35-25B
- LPD35-30B
- LPD35-35B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 4.7(W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE. REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

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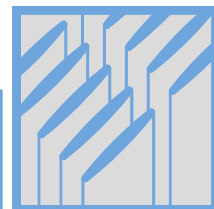
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E mail : sales@alphanovatech.com
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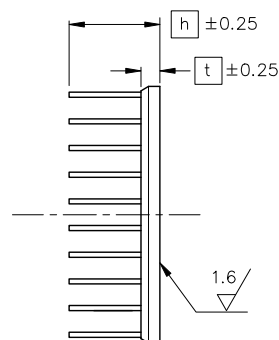
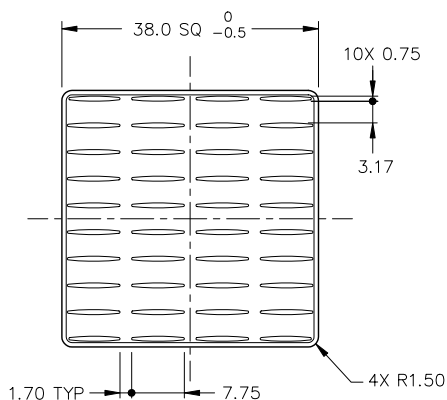
ALPHA

Low Pressure Drop Heat Sink

LPD38



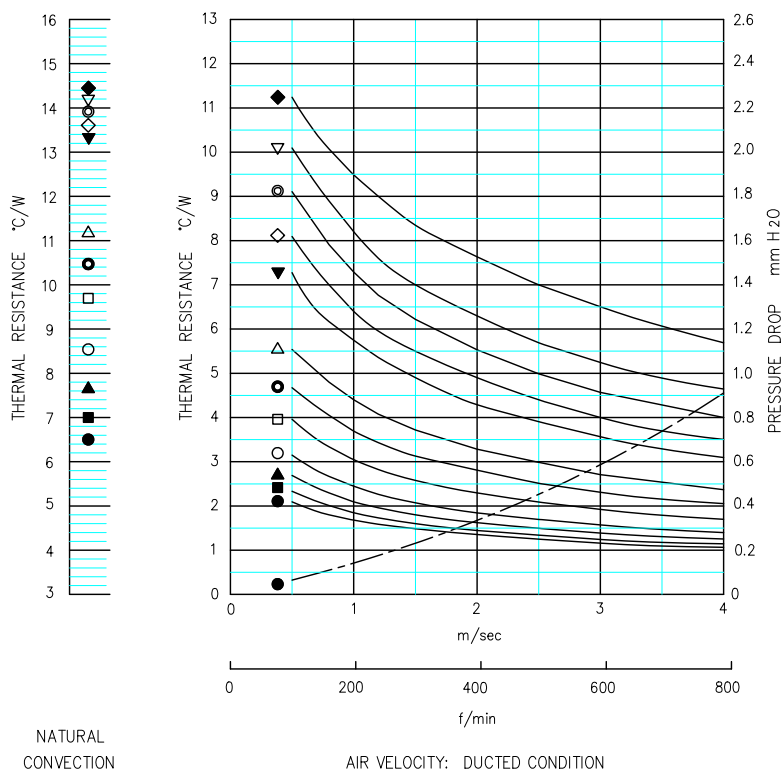
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD38-3B	3	2.00	8.2
LPD38-4B	4		8.7
LPD38-5B	5		9.2
LPD38-6B	6		9.7
LPD38-7B	7		10.2
LPD38-10B	10	3.00	15.0
LPD38-12B	12		16.1
LPD38-15B	15		17.6
LPD38-20B	20		20.1
LPD38-25B	25		22.6
LPD38-30B	30		25.2
LPD38-35B	35		27.7
LPD38-[h]B	$h \leq 7$	2.00	-
	$7 < h \leq 35$	3.00	-

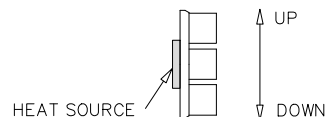
DATA



- ◆ LPD38-3B
- ▽ LPD38-4B
- ⊙ LPD38-5B
- ◇ LPD38-6B
- ▼ LPD38-7B
- △ LPD38-10B
- LPD38-12B
- LPD38-15B
- LPD38-20B
- ▲ LPD38-25B
- LPD38-30B
- LPD38-35B

● DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE _____
PRESSURE DROP - - - -

● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER:
LPD38-3B ~ LPD38-7B = 3.0(W)
LPD38-10B ~ LPD38-35B = 4.5(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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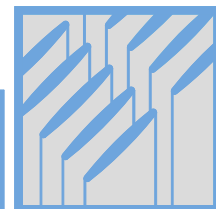
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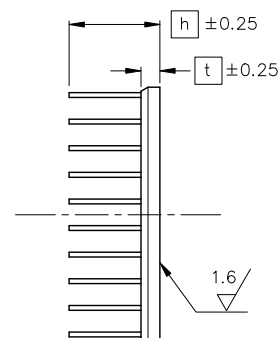
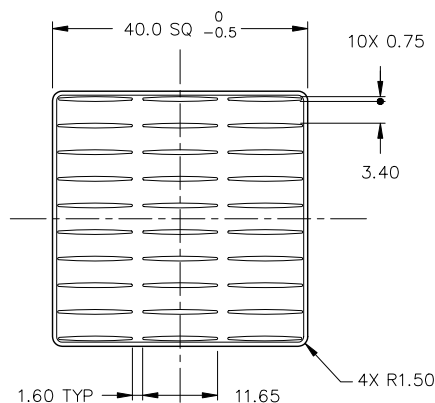
ALPHA

Low Pressure Drop Heat Sink

LPD40



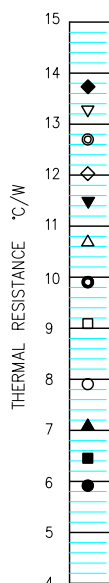
DIM



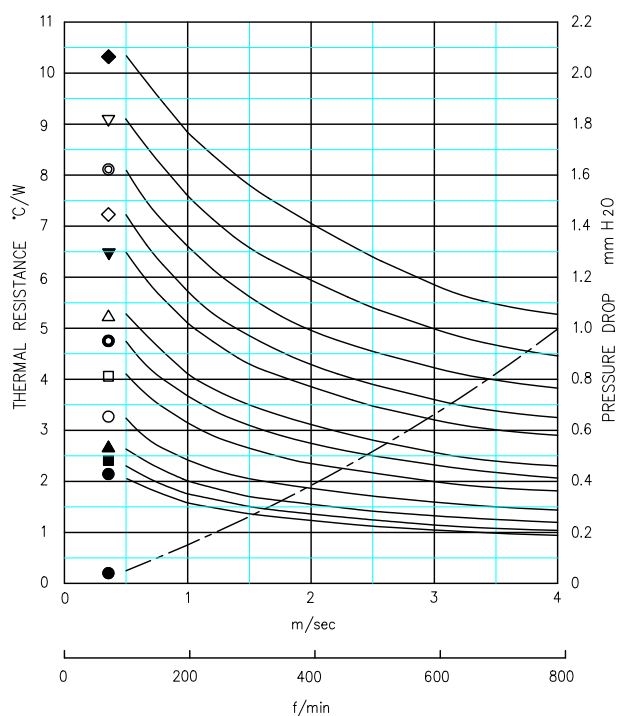
MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD40-3B	3	2.00	9.4
LPD40-4B	4		10.0
LPD40-5B	5		10.6
LPD40-6B	6		11.2
LPD40-7B	7		11.8
LPD40-10B	10	3.00	16.4
LPD40-12B	12		17.5
LPD40-15B	15		19.2
LPD40-20B	20		22.0
LPD40-25B	25		24.8
LPD40-30B	30		27.6
LPD40-35B	35		30.4
LPD40-[h]B	$[h] \leq 7$	2.00	-
	$7 < [h] \leq 35$	3.00	-

DATA



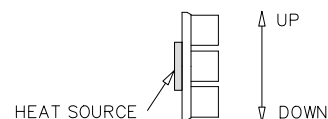
NATURAL
CONVECTION



AIR VELOCITY: DUCTED CONDITION

- ◆ LPD40-3B
- ▽ LPD40-4B
- ⊙ LPD40-5B
- ◇ LPD40-6B
- ▼ LPD40-7B
- △ LPD40-10B
- LPD40-12B
- LPD40-15B
- LPD40-20B
- ▲ LPD40-25B
- LPD40-30B
- LPD40-35B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 6.0 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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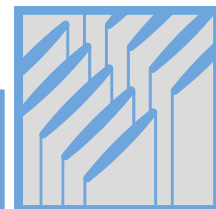
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URL : <https://www.alphanovatech.com>

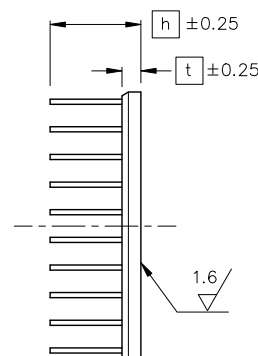
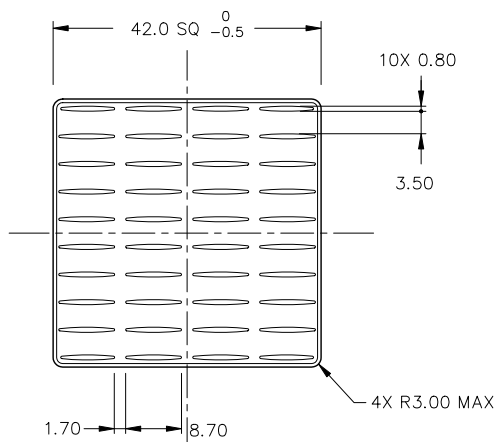
ALPHA

Low Pressure Drop Heat Sink

LPD42



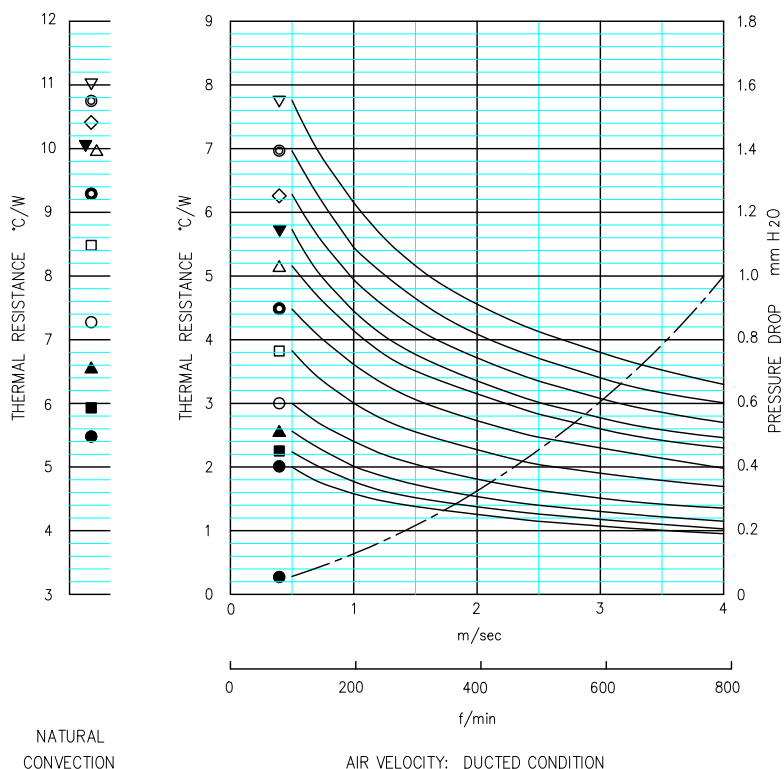
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

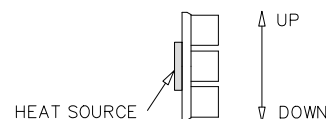
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD42-6B	6	2.50	13.7
LPD42-7B	7		14.3
LPD42-8B	8		14.9
LPD42-9B	9		15.5
LPD42-10B	10	3.00	18.1
LPD42-12B	12		19.3
LPD42-15B	15		21.1
LPD42-20B	20		24.1
LPD42-25B	25		27.1
LPD42-30B	30		30.1
LPD42-35B	35		33.1
LPD42-[h]B	$[h] \leq 9$	2.50	-
	$9 < [h] \leq 35$	3.00	-

DATA



- ▽ LPD42-6B
- LPD42-7B
- ◇ LPD42-8B
- ▼ LPD42-9B
- △ LPD42-10B
- LPD42-12B
- LPD42-15B
- LPD42-20B
- ▲ LPD42-25B
- LPD42-30B
- LPD42-35B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 5.5 (W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

BASED ON ALPHA'S STANDARD TEST PROCEDURE. REFER TO TECHNICAL INFORMATION.

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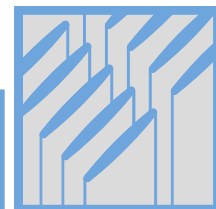
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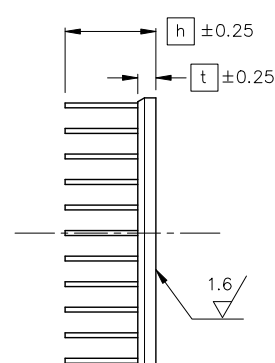
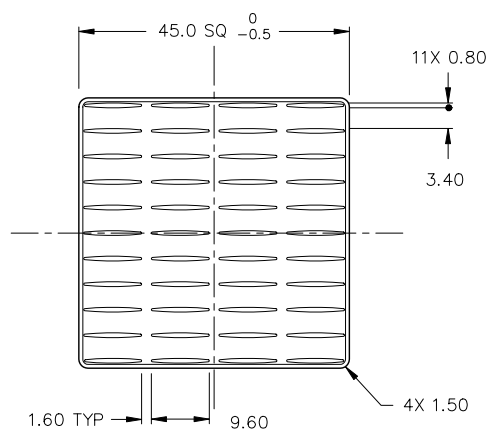
ALPHA

Low Pressure Drop Heat Sink

LPD45



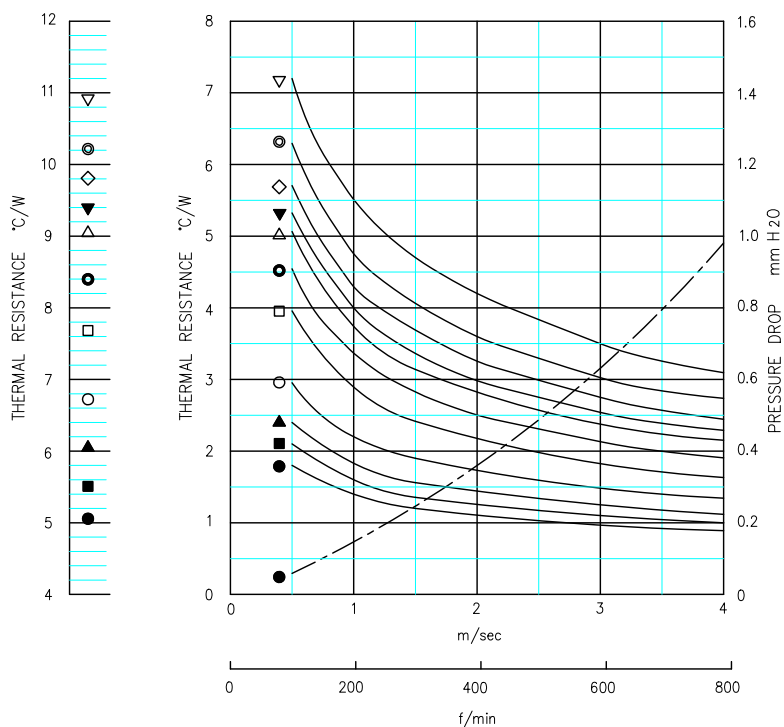
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

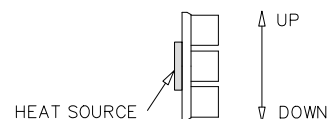
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD45-6B	6	2.50	15.8
LPD45-7B	7		16.7
LPD45-8B	8		17.3
LPD45-9B	9		18.7
LPD45-10B	10	3.00	21.2
LPD45-12B	12		22.6
LPD45-15B	15		24.7
LPD45-20B	20		28.2
LPD45-25B	25		31.7
LPD45-30B	30		36.0
LPD45-35B	35		39.6
LPD45-[h]B	[h] ≤ 9	2.50	-
	9 < [h] ≤ 35	3.00	-

DATA



- ▽ LPD45-6B □ LPD45-15B
- ⊙ LPD45-7B ○ LPD45-20B
- ◇ LPD45-8B ▲ LPD45-25B
- ▼ LPD45-9B ■ LPD45-30B
- △ LPD45-10B ● LPD45-35B
- ⦿ LPD45-12B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 7.5 (W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE. REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

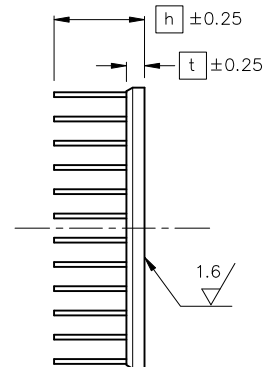
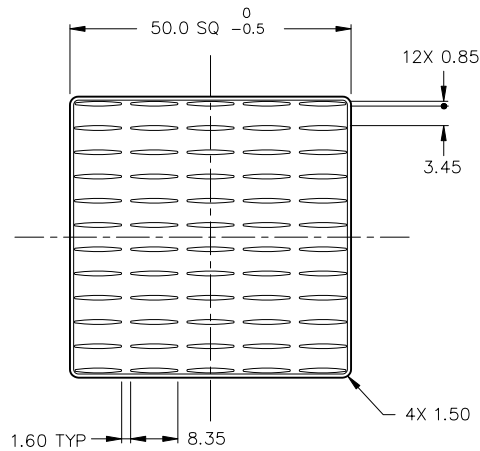
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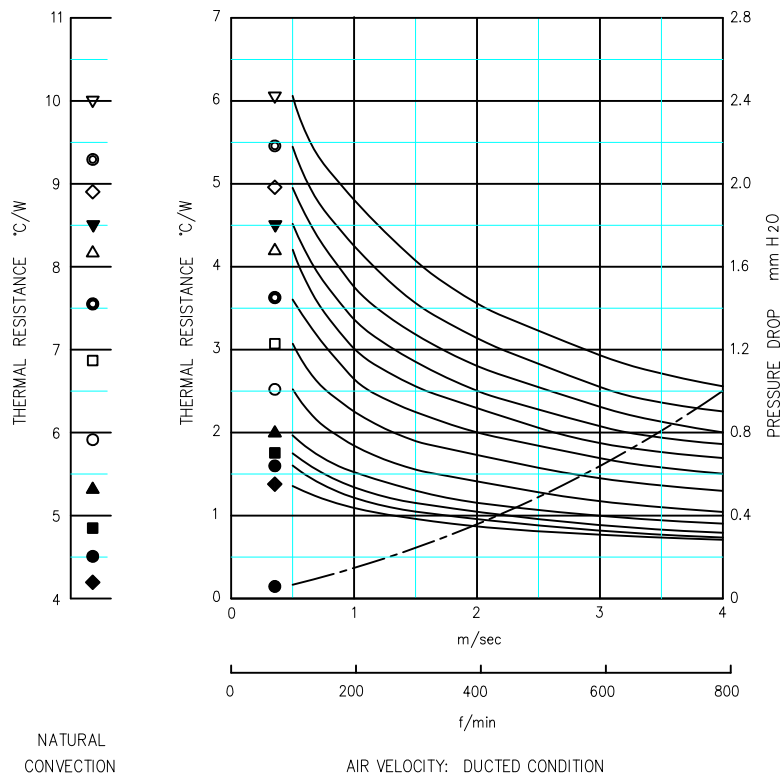
ALPHA

Low Pressure Drop Heat Sink LPD50



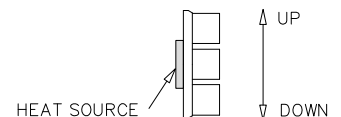
MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD50-6B	6	2.50	19.6
LPD50-7B	7		20.4
LPD50-8B	8		21.4
LPD50-9B	9		22.1
LPD50-10B	10	3.50	29.2
LPD50-12B	12		31.0
LPD50-15B	15		33.9
LPD50-20B	20		37.8
LPD50-25B	25		42.0
LPD50-30B	30		46.7
LPD50-35B	35		52.0
LPD50-40B	40		56.1
LPD50-[h]B	[h] ≤ 9	2.50	-
	9 < [h] ≤ 40	3.50	-



- ▽ LPD50-6B
- ⊙ LPD50-7B
- ◇ LPD50-8B
- ▼ LPD50-9B
- △ LPD50-10B
- ⊙ LPD50-12B
- LPD50-15B
- LPD50-20B
- ▲ LPD50-25B
- LPD50-30B
- LPD50-35B
- ◆ LPD50-40B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 8.0 (W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

BASED ON ALPHA'S STANDARD TEST PROCEDURE. REFER TO TECHNICAL INFORMATION.

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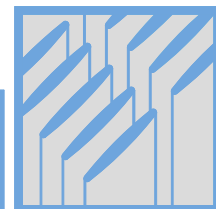
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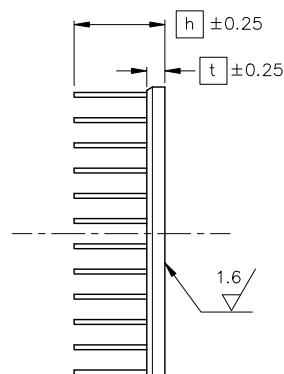
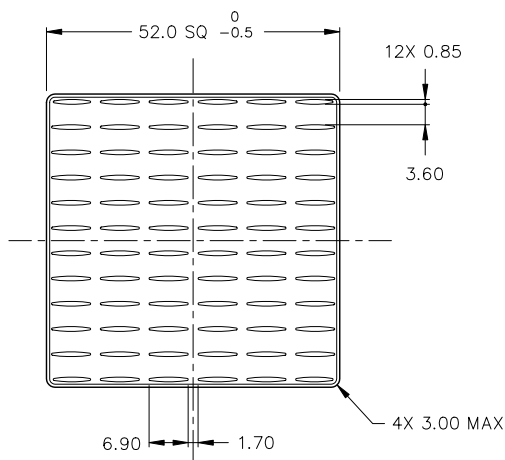
ALPHA

Low Pressure Drop Heat Sink

LPD52



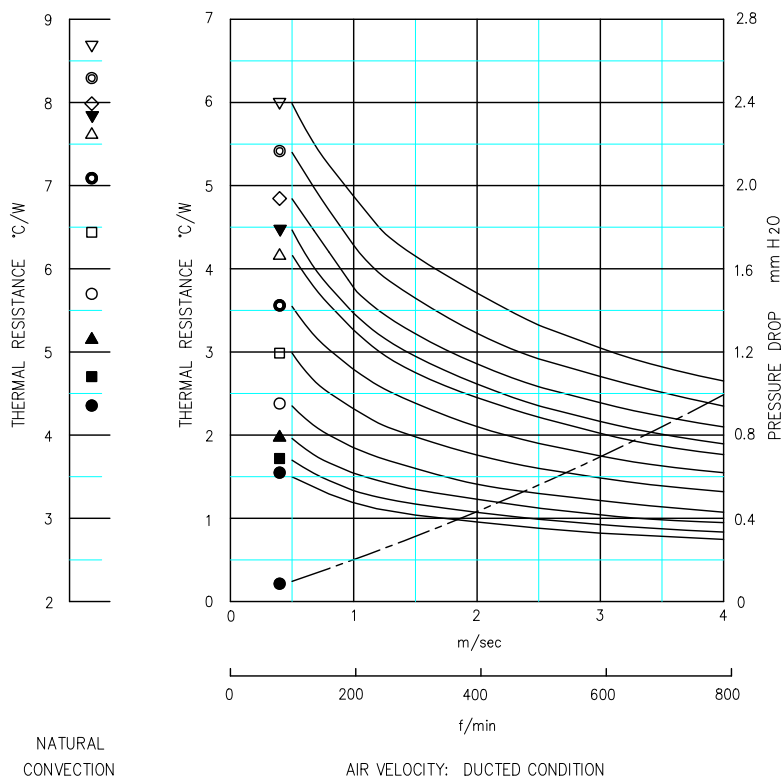
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

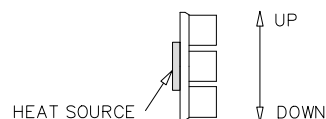
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD52-6B	6	2.50	20.9
LPD52-7B	7		21.8
LPD52-8B	8		22.7
LPD52-9B	9		23.6
LPD52-10B	10	3.50	30.8
LPD52-12B	12		32.6
LPD52-15B	15		35.3
LPD52-20B	20		39.7
LPD52-25B	25		44.2
LPD52-30B	30		48.6
LPD52-35B	35		53.1
LPD52-[h]B	[h] ≤ 9	2.50	-
	9 < [h] ≤ 35	3.50	-

DATA



- ▽ LPD52-6B
- ⊙ LPD52-7B
- ◇ LPD52-8B
- ▼ LPD52-9B
- △ LPD52-10B
- LPD52-12B
- LPD52-15B
- LPD52-20B
- ▲ LPD52-25B
- LPD52-30B
- LPD52-35B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 7.2 (W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE. REFER TO TECHNICAL INFORMATION.

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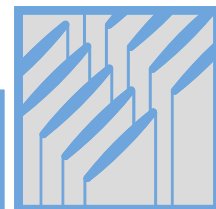
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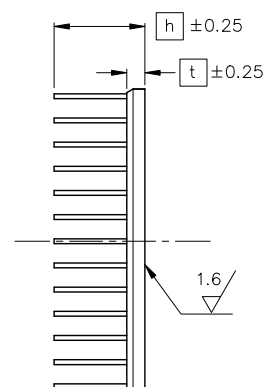
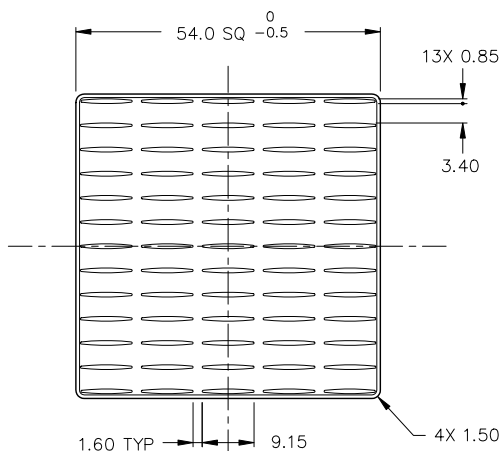
ALPHA

Low Pressure Drop Heat Sink

LPD54



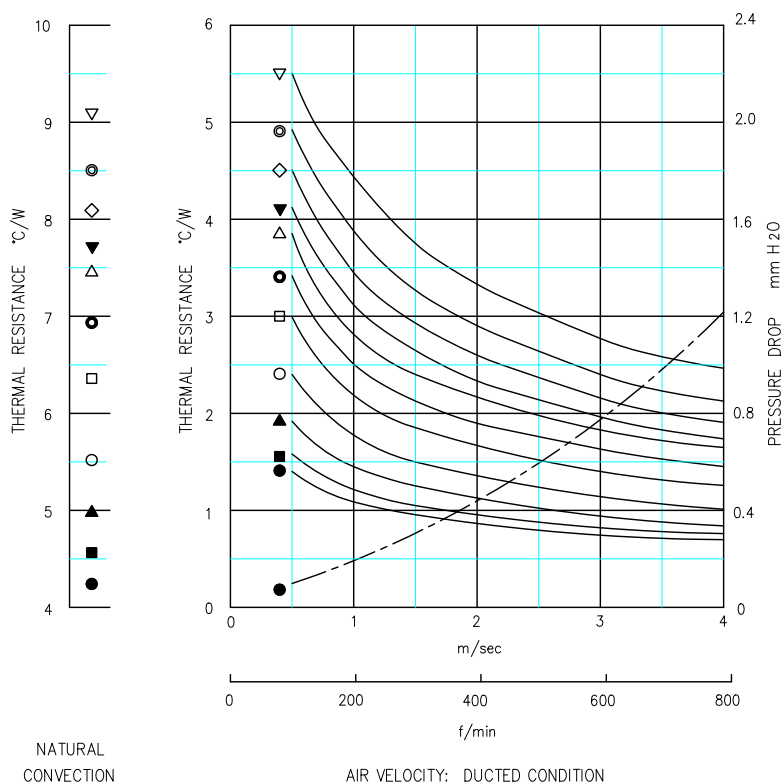
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

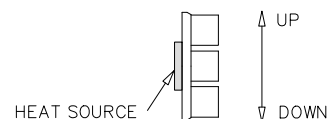
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD54-6B	6	3.00	27.0
LPD54-7B	7		28.0
LPD54-8B	8		29.0
LPD54-9B	9		30.0
LPD54-10B	10	4.00	37.5
LPD54-12B	12		39.5
LPD54-15B	15		42.4
LPD54-20B	20		47.3
LPD54-25B	25		52.2
LPD54-30B	30		58.5
LPD54-35B	35		63.8
LPD54-[h]B	[h] ≤ 9	3.00	-
	9 < [h] ≤ 35	4.00	-

DATA



- ▽ LPD54-6B
- ⊙ LPD54-7B
- ◇ LPD54-8B
- ▼ LPD54-9B
- △ LPD54-10B
- LPD54-12B
- LPD54-15B
- LPD54-20B
- ▲ LPD54-25B
- LPD54-30B
- LPD54-35B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 8.3 (W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE. REFER TO TECHNICAL INFORMATION.

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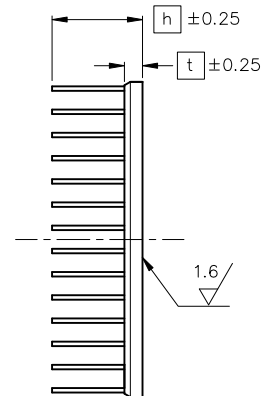
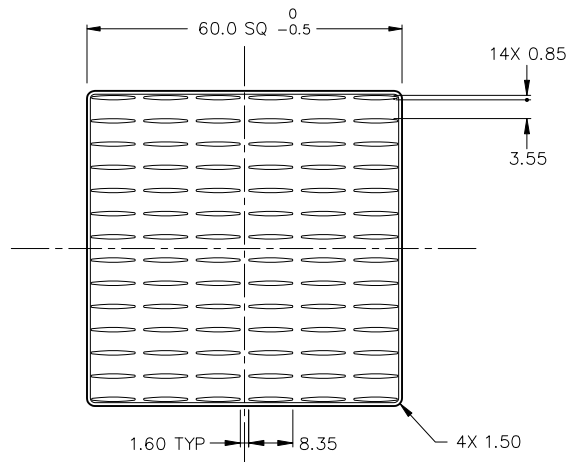
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

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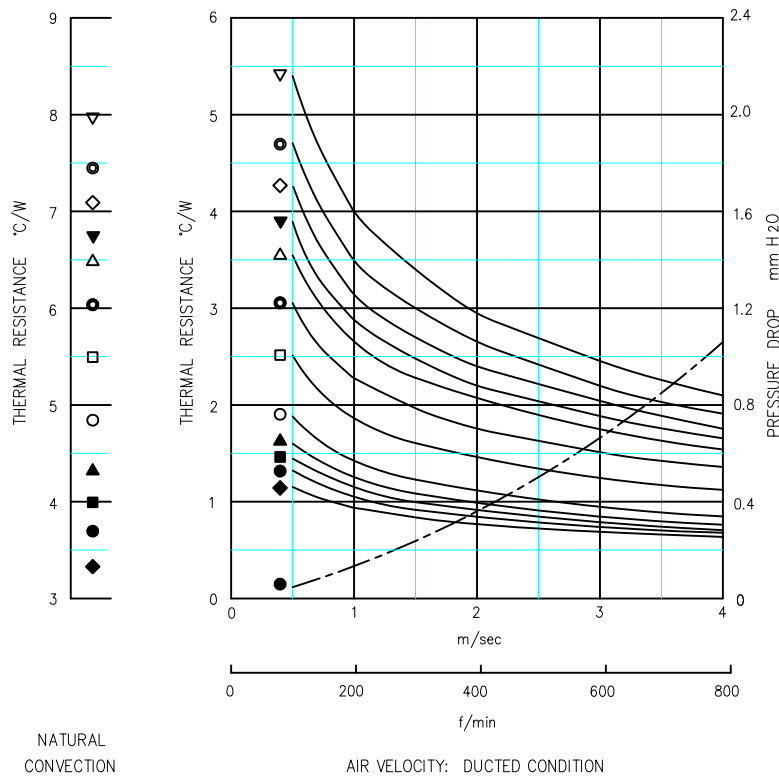
Low Pressure Drop Heat Sink

LPD60



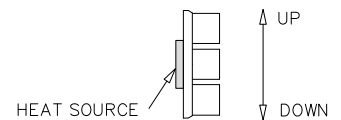
MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD60-6B	6	3.00	33.1
LPD60-7B	7		35.0
LPD60-8B	8		36.9
LPD60-9B	9		37.4
LPD60-10B	10	4.00	45.6
LPD60-12B	12		47.9
LPD60-15B	15		51.4
LPD60-20B	20		57.2
LPD60-25B	25		65.0
LPD60-30B	30		71.3
LPD60-35B	35		77.5
LPD60-40B	40		86.7
LPD60-[h]B	[h] ≤ 9	3.00	-
	9 < [h] ≤ 40	4.00	-



- ▽ LPD60-6B
- LPD60-7B
- ◇ LPD60-8B
- ▼ LPD60-9B
- △ LPD60-10B
- LPD60-12B
- LPD60-15B
- LPD60-20B
- ▲ LPD60-25B
- LPD60-30B
- LPD60-35B
- ◆ LPD60-40B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 9.9 (W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE. REFER TO TECHNICAL INFORMATION.

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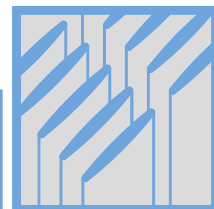
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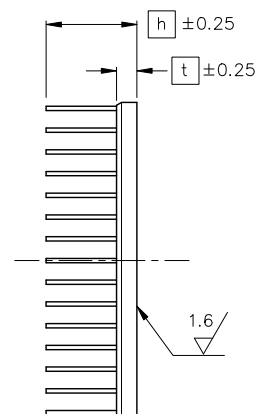
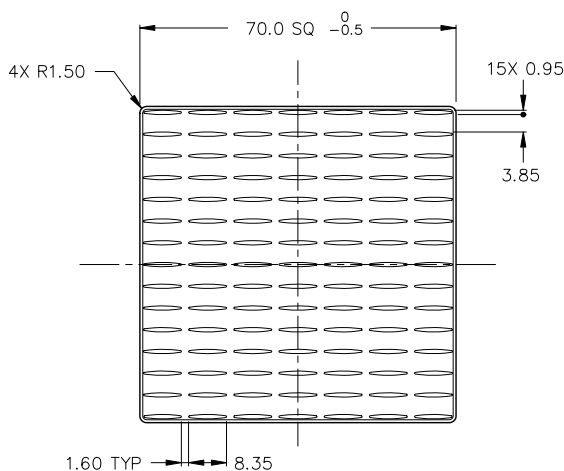
ALPHA

Low Pressure Drop Heat Sink

LPD 70



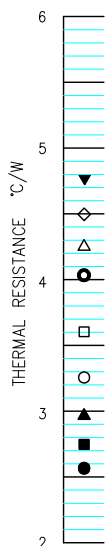
DIM



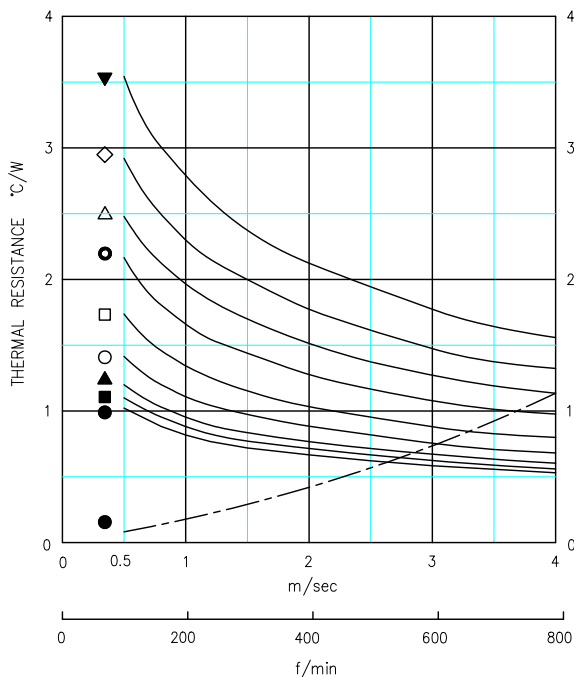
MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD70-8B	8	3.00	48.1
LPD70-10B	10		51.6
LPD70-12B	12		55.1
LPD70-15B	15	4.50	77.4
LPD70-20B	20		85.7
LPD70-25B	25		94.0
LPD70-30B	30		102.3
LPD70-35B	35		112.0
LPD70-40B	40		121.0
LPD70-[h]B	[h] ≤ 12	3.00	-
	12 < [h] ≤ 40	4.50	-

DATA



NATURAL
CONVECTION

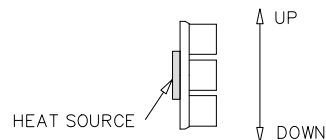


AIR VELOCITY: DUCTED CONDITION

- ▼ LPD70-8B
- ◇ LPD70-10B
- △ LPD70-12B
- LPD70-15B
- LPD70-20B
- LPD70-25B
- ▲ LPD70-30B
- LPD70-35B
- LPD70-40B

● DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE _____
PRESURE DROP - - - - -

● NATURAL CONVECTION
DUMMY HEATER SIZE: 25.4 SQ
DISSIPATED POWER: 13.3 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

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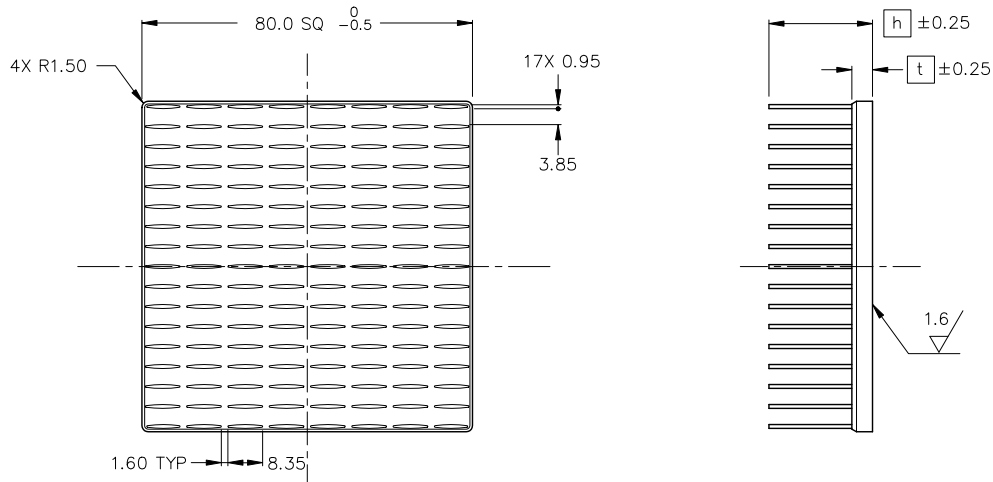
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ALPHA

Low Pressure Drop Heat Sink LPD80



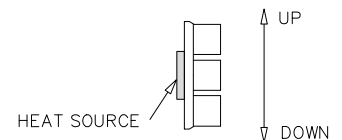
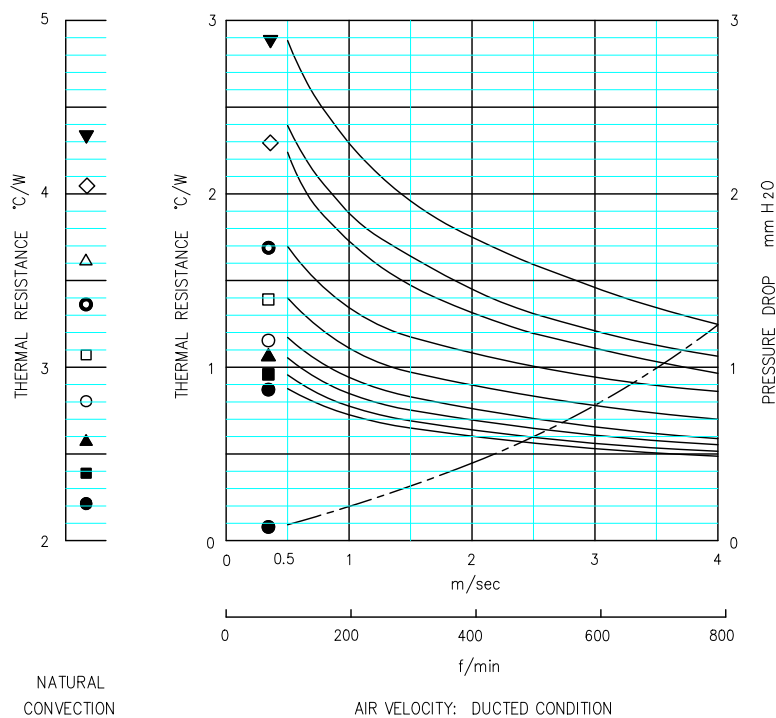
DIM



MATERIAL : A6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

MODEL	HEIGHT h	THICKNESS t	WEIGHT (grams)
LPD80-8B	8	4.00	77.6
LPD80-10B	10		82.1
LPD80-12B	12		86.7
LPD80-15B	15	5.00	108.6
LPD80-20B	20		119.3
LPD80-25B	25		130.0
LPD80-30B	30		140.7
LPD80-35B	35		152.4
LPD80-40B	40		164.3
LPD80- h B	$h \leq 12$	4.00	-
	$12 < h \leq 40$	5.00	-

DATA



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

BASED ON ALPHA'S STANDARD TEST PROCEDURE. REFER TO TECHNICAL INFORMATION.

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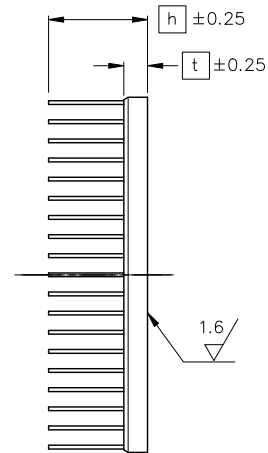
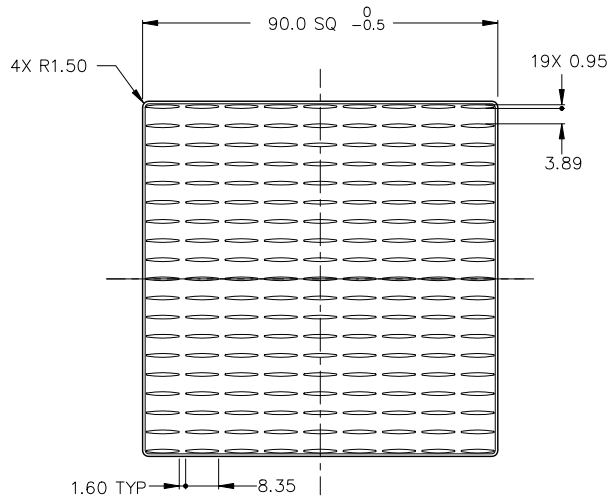
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ALPHA

Low Pressure Drop Heat Sink

LPD 90

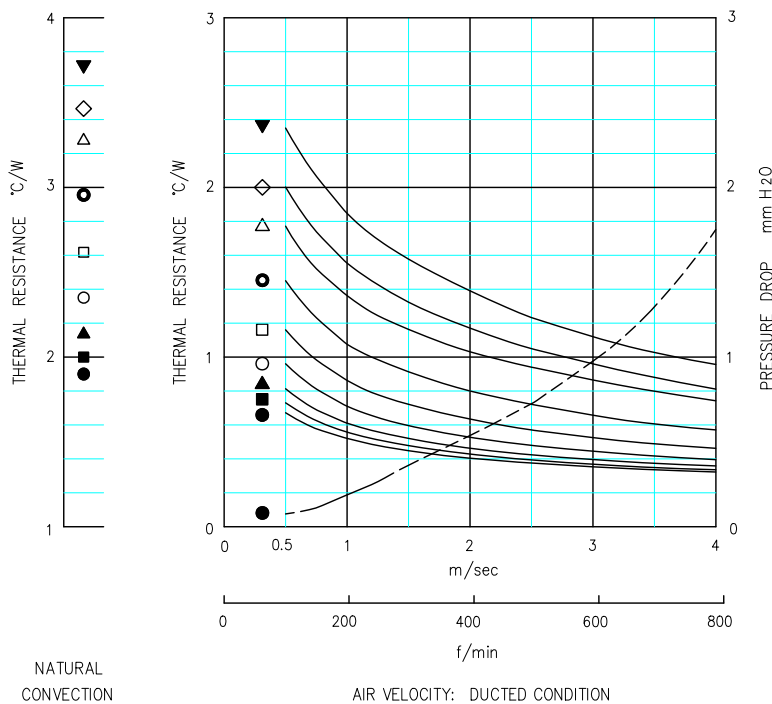
DIM



MATERIAL : A6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD90-8B	8	4.00	98.2
LPD90-10B	10		103.9
LPD90-12B	12		109.5
LPD90-15B	15	6.00	155.0
LPD90-20B	20		168.8
LPD90-25B	25		182.6
LPD90-30B	30		196.4
LPD90-35B	35		210.2
LPD90-40B	40		224.0
LPD90-[h]B	[h] ≤ 12	4.00	-
	12 < [h] ≤ 40	6.00	-

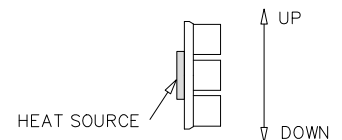
DATA



- ▼ LPD90-8B
- ◇ LPD90-10B
- △ LPD90-12B
- LPD90-15B
- LPD90-20B
- LPD90-25B
- ▲ LPD90-30B
- LPD90-35B
- LPD90-40B

● DUCTED CONDITION
 DUMMY HEATER SIZE: 25.4 SQ
 THERMAL RESISTANCE _____
 PRESURE DROP - - - - -

● NATURAL CONVECTION
 DUMMY HEATER SIZE: 25.4 SQ
 DISSIPATED POWER: 18.6 (W)



NOTE ORIENTATION OF HEAT SINK USED
 FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
 REFER TO TECHNICAL INFORMATION.

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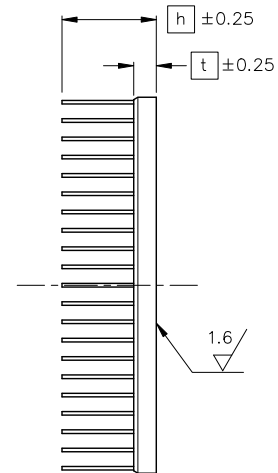
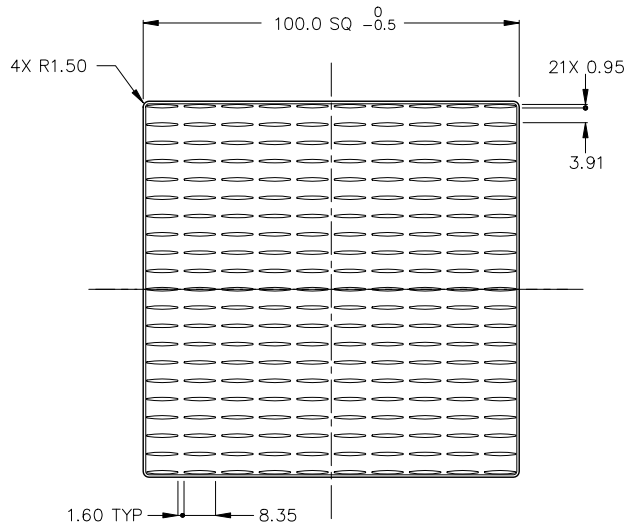
ALPHA

Low Pressure Drop Heat Sink

LPD100



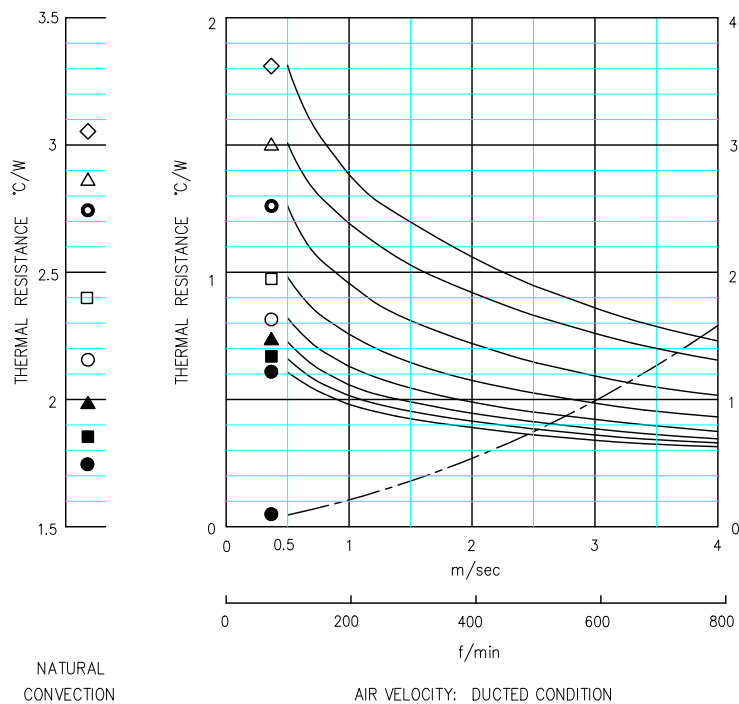
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD100-10B	10	139.9
LPD100-12B	12	146.9
LPD100-15B	15	191.0
LPD100-20B	20	207.8
LPD100-25B	25	224.6
LPD100-30B	30	241.4
LPD100-35B	35	258.2
LPD100-40B	40	275.0

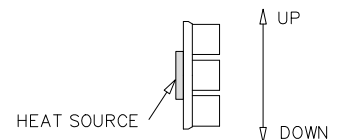
DATA



- ◇ LPD100-10B
- △ LPD100-12B
- LPD100-15B
- LPD100-20B
- LPD100-25B
- ▲ LPD100-30B
- LPD100-35B
- LPD100-40B

● DUCTED CONDITION
DUMMY HEATER SIZE: 25.4 SQ
THERMAL RESISTANCE _____
PRESSURE DROP - - - - -

● NATURAL CONVECTION
DUMMY HEATER SIZE: 25.4 SQ
DISSIPATED POWER: 20.6 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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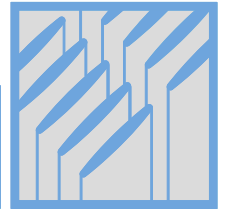
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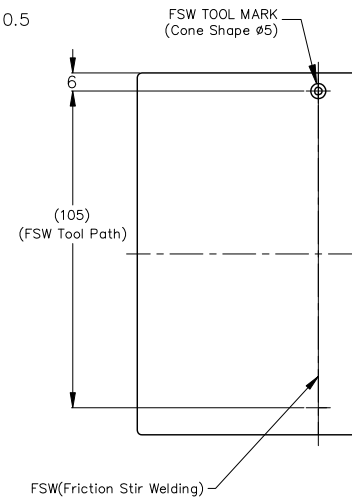
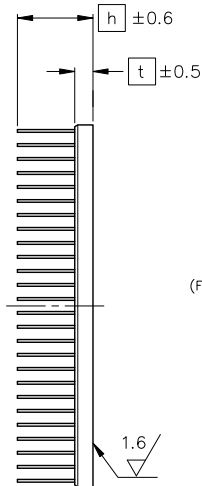
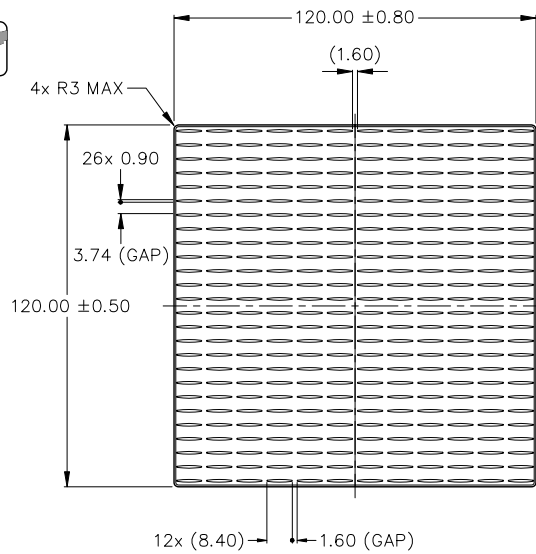
ALPHA

Low Pressure Drop Heat Sink

LPD120



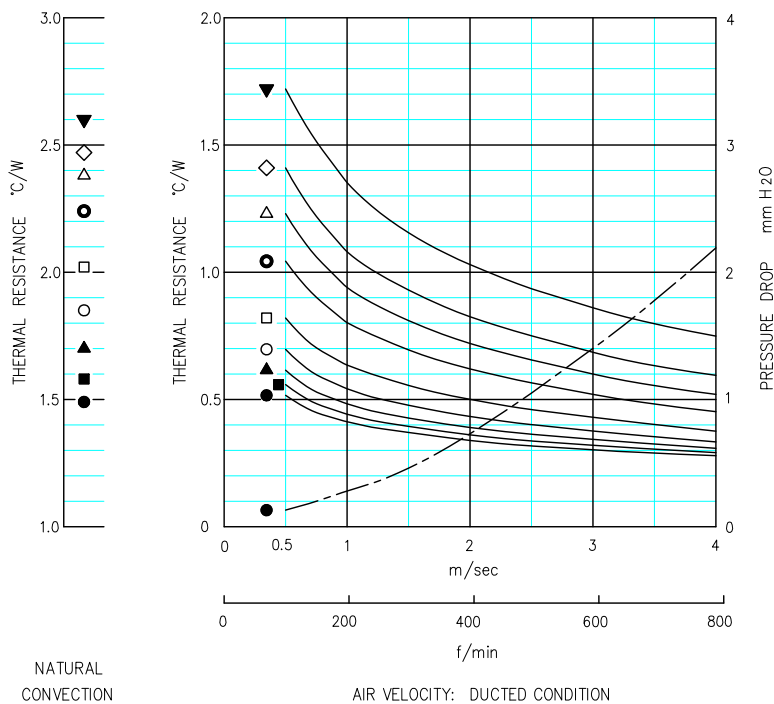
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

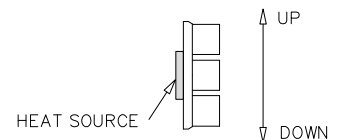
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD120-8B	8	4.00	174.7
LPD120-10B	10	4.00	184.6
LPD120-12B	12	5.00	228.3
LPD120-15B	15	5.00	277.0
LPD120-20B	20	6.00	301.8
LPD120-25B	25	6.00	326.7
LPD120-30B	30	6.00	351.6
LPD120-35B	35	6.00	376.5
LPD120-40B	40	6.00	401.4
LPD120-[h]B	[h] ≤ 10	4.00	-
	10 < [h] ≤ 12	5.00	-
	12 < [h] ≤ 40	6.00	-

DATA



- ▼ LPD120-8B
- ◇ LPD120-10B
- △ LPD120-12B
- LPD120-15B
- LPD120-20B
- LPD120-25B
- ▲ LPD120-30B
- LPD120-35B
- LPD120-40B

- DUCTED CONDITION
DUMMY HEATER SIZE: 25.4 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 25.4 SQ
DISSIPATED POWER: 22 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

- BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

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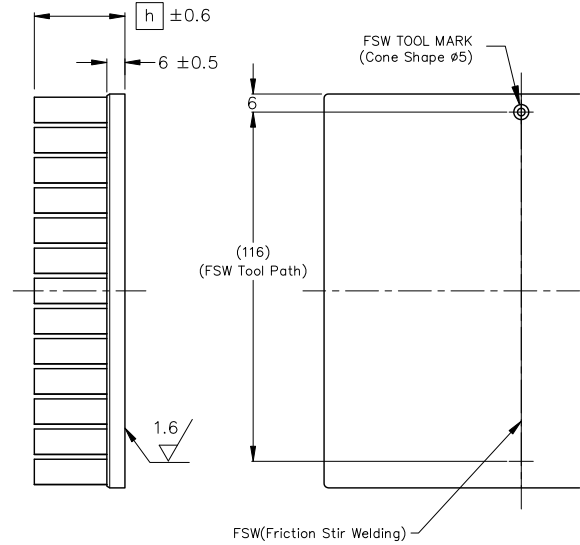
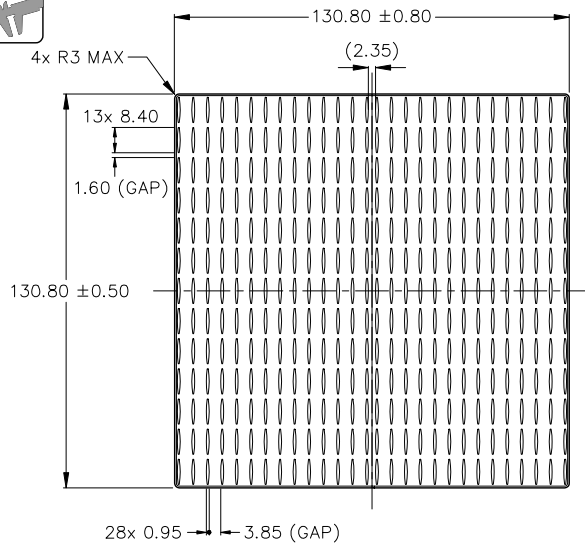
ALPHA

Low Pressure Drop Heat Sink

LPD130



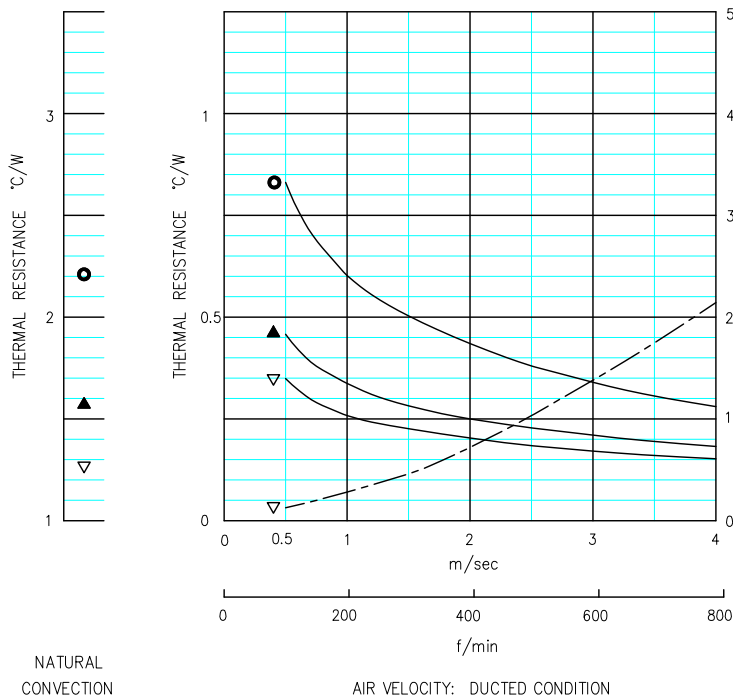
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

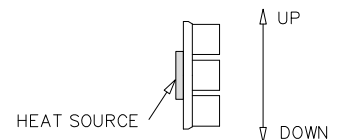
MODEL	HEIGHT [h]	WEIGHT (grams)
LPD130-15B	15	331.0
LPD130-20B	20	361.3
LPD130-25B	25	391.7
LPD130-30B	30	422.0
LPD130-35B	35	452.4
LPD130-40B	40	482.8
LPD130-45B	45	513.1

DATA



○ LPD130-15B
▲ LPD130-30B
▽ LPD130-45B

● DUCTED CONDITION
DUMMY HEATER SIZE: 70 SQ
THERMAL RESISTANCE
PRESSURE DROP
● NATURAL CONVECTION
DUMMY HEATER SIZE: 70 SQ
DISSIPATED POWER: 30 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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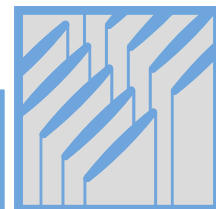
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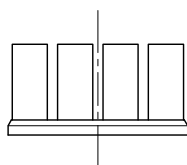
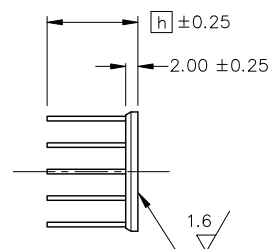
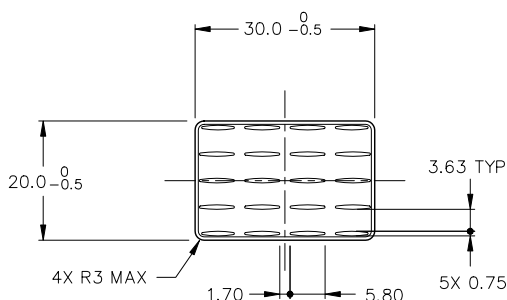
ALPHA

Low Pressure Drop Heat Sink

LPD2030



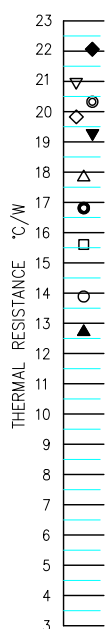
DIM



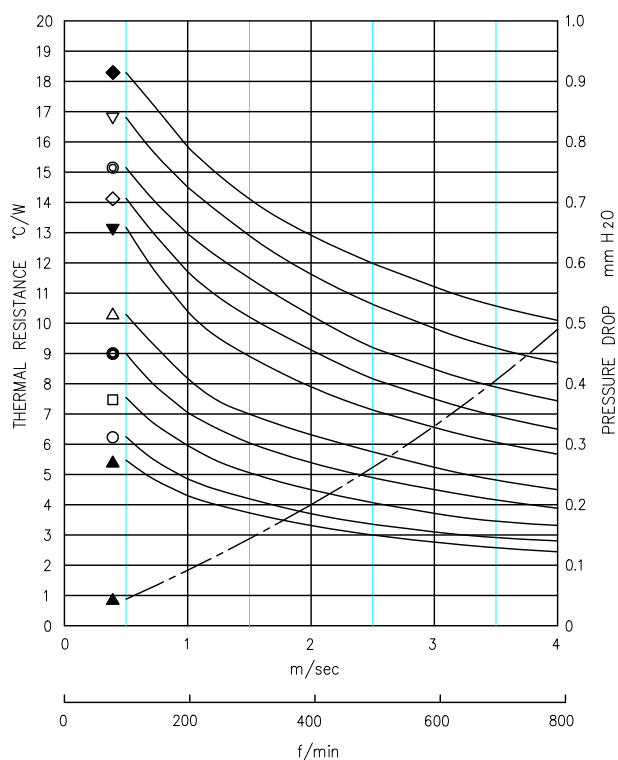
MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD2030-3B	3	3.3
LPD2030-4B	4	3.5
LPD2030-5B	5	3.7
LPD2030-6B	6	3.9
LPD2030-7B	7	4.1
LPD2030-10B	10	4.7
LPD2030-12B	12	5.0
LPD2030-15B	15	5.6
LPD2030-20B	20	6.5
LPD2030-25B	25	7.5

DATA



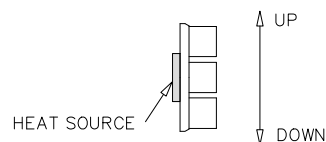
NATURAL
CONVECTION



AIR VELOCITY: DUCTED CONDITION

- ◆ LPD2030-3B △ LPD2030-10B
- ▽ LPD2030-4B ● LPD2030-12B
- ◎ LPD2030-5B □ LPD2030-15B
- ◇ LPD2030-6B ○ LPD2030-20B
- ▼ LPD2030-7B ▲ LPD2030-25B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE ————
PRESSURE DROP - - - -
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 2.05(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

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PHONE +81(55)966 0789
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URL : <https://www.micforg.co.jp>

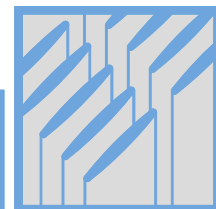
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PHONE +1(408)567-8082
FAX +1(408)567-8053
E mail : sales@alphanovatech.com
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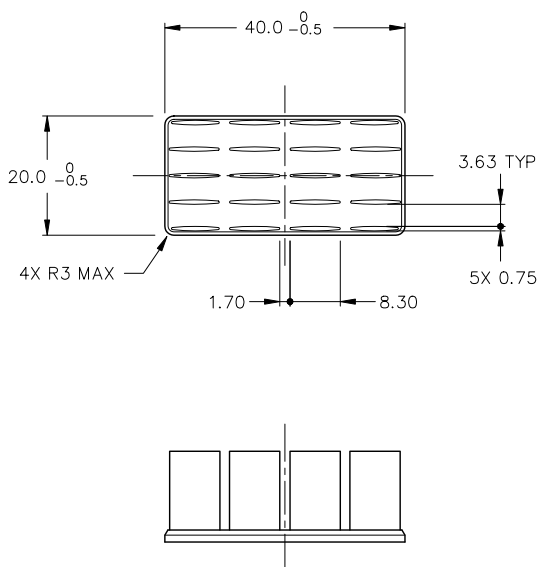
ALPHA

Low Pressure Drop Heat Sink

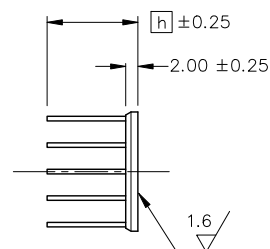
LPD2040



DIM

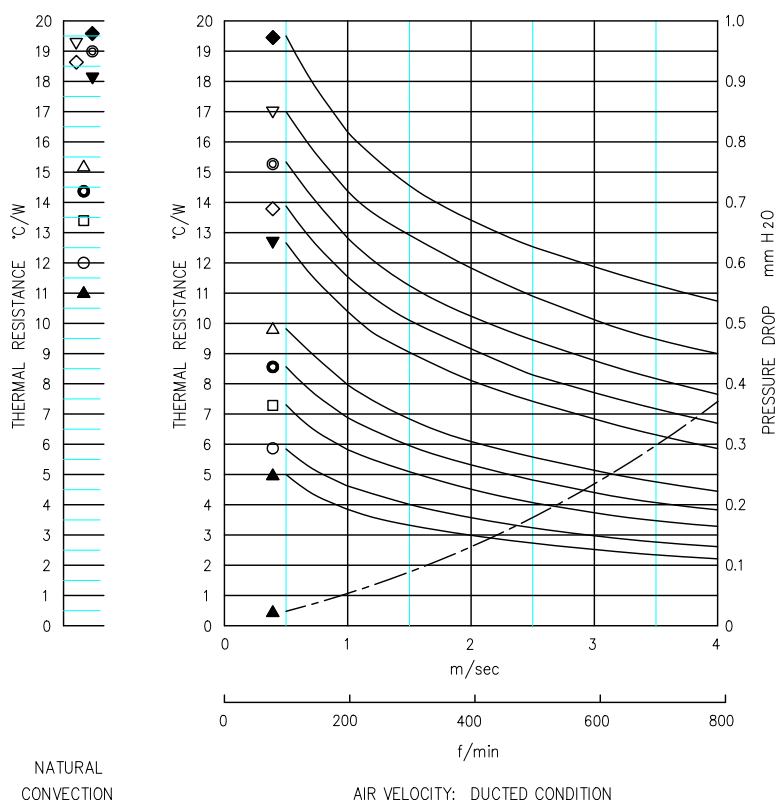


MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm



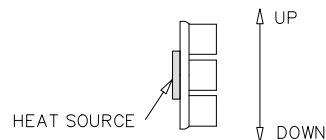
MODEL	HEIGHT [h]	WEIGHT (grams)
LPD2040-3B	3	4.5
LPD2040-4B	4	4.8
LPD2040-5B	5	5.0
LPD2040-6B	6	5.3
LPD2040-7B	7	5.6
LPD2040-10B	10	6.4
LPD2040-12B	12	6.9
LPD2040-15B	15	7.9
LPD2040-20B	20	9.1
LPD2040-25B	25	10.5

DATA



- ◆ LPD2040-3B
- ▽ LPD2040-4B
- LPD2040-5B
- ◇ LPD2040-6B
- ▼ LPD2040-7B
- △ LPD2040-10B
- LPD2040-12B
- LPD2040-15B
- LPD2040-20B
- ▲ LPD2040-25B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER:
LPD2040-3B ~ -7B = 1.75(W)
LPD2040-10B ~ -25B = 2.65(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

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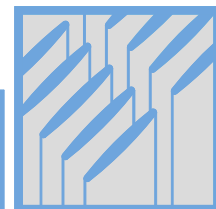
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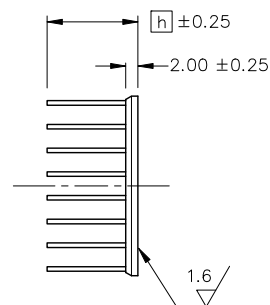
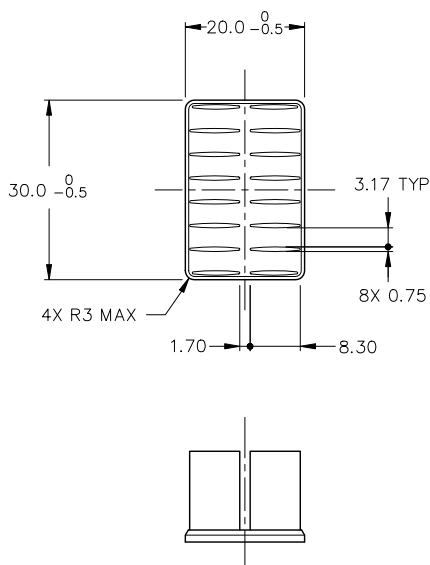
ALPHA

Low Pressure Drop Heat Sink

LPD3020



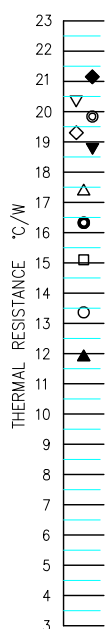
DIM



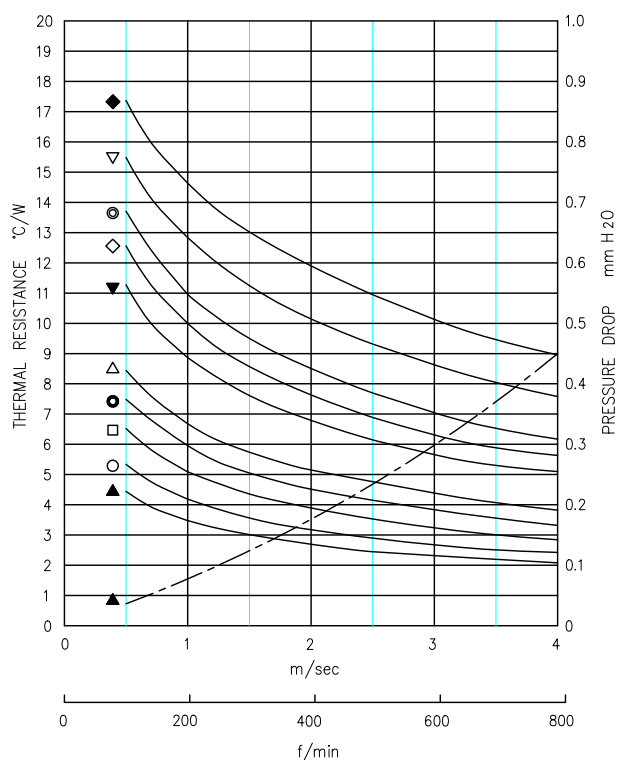
MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD3020-3B	3	3.4
LPD3020-4B	4	3.6
LPD3020-5B	5	3.8
LPD3020-6B	6	4.0
LPD3020-7B	7	4.2
LPD3020-10B	10	4.9
LPD3020-12B	12	5.3
LPD3020-15B	15	6.0
LPD3020-20B	20	7.1
LPD3020-25B	25	8.2

DATA



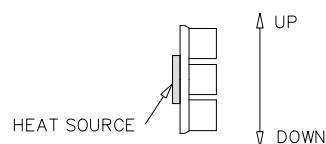
NATURAL
CONVECTION



AIR VELOCITY: DUCTED CONDITION

- ◆ LPD3020-3B △ LPD3020-10B
- ▽ LPD3020-4B ● LPD3020-12B
- ◎ LPD3020-5B □ LPD3020-15B
- ◇ LPD3020-6B ○ LPD3020-20B
- ▼ LPD3020-7B ▲ LPD3020-25B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE ———
PRESSURE DROP - - -
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 2.20(W)



NOTE ORIENTATION OF HEAT SINK USED
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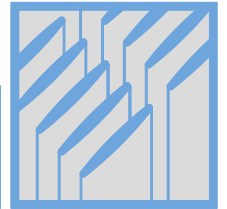
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E mail : sales@alphanovatech.com
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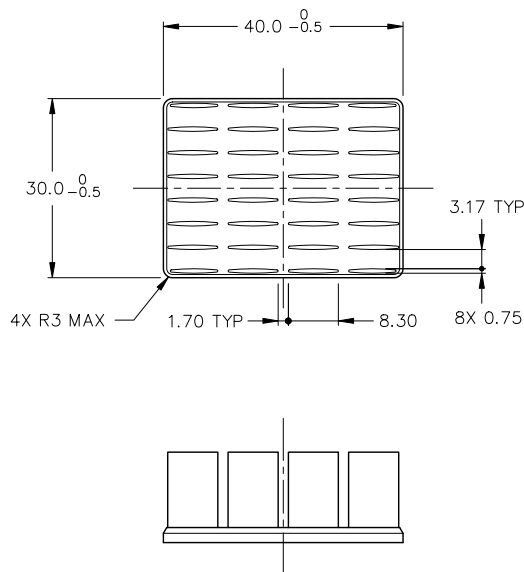
ALPHA

Low Pressure Drop Heat Sink

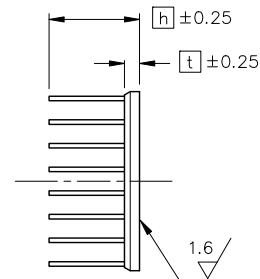
LPD3040



DIM

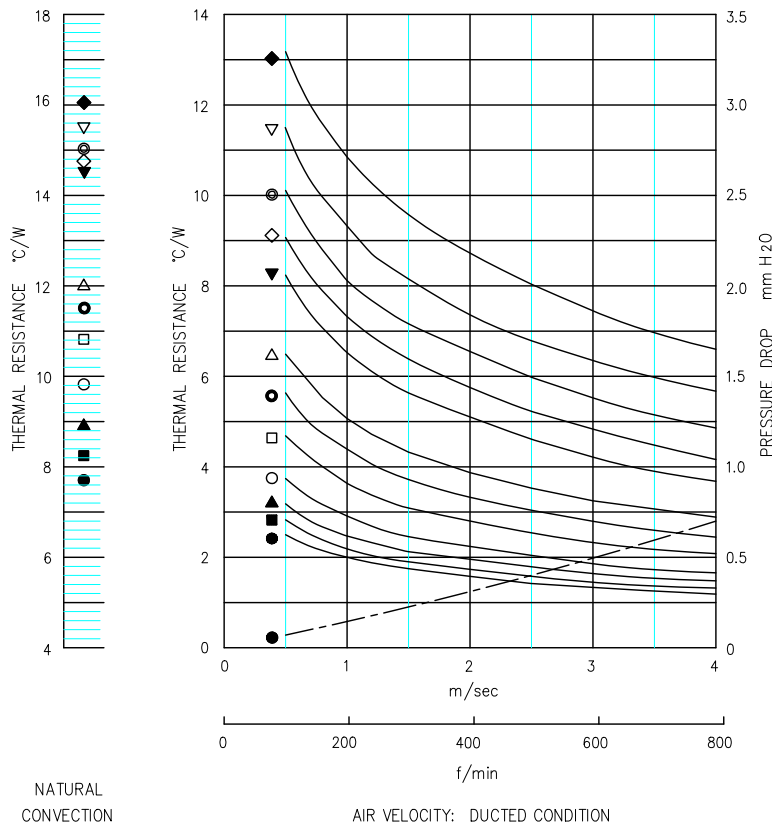


MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm



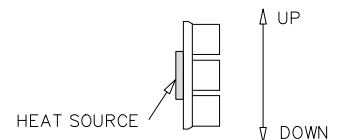
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD3040-3B	3	2.00	6.7
LPD3040-4B	4		7.1
LPD3040-5B	5		7.5
LPD3040-6B	6		8.0
LPD3040-7B	7		8.4
LPD3040-10B	10	2.50	11.1
LPD3040-12B	12		11.9
LPD3040-15B	15		13.2
LPD3040-20B	20		15.4
LPD3040-25B	25		17.6
LPD3040-30B	30		19.7
LPD3040-35B	35		21.9
LPD3040-[h]B	[h] ≤ 7	2.00	-
	7 < [h] ≤ 35	2.50	-

DATA



- ◆ LPD3040-3B
- ▽ LPD3040-4B
- LPD3040-5B
- ◇ LPD3040-6B
- ▼ LPD3040-7B
- △ LPD3040-10B
- LPD3040-12B
- LPD3040-15B
- LPD3040-20B
- ▲ LPD3040-25B
- LPD3040-30B
- LPD3040-35B

- DUCTED CONDITION
- DUMMY HEATER SIZE: 12.7 SQ
- THERMAL RESISTANCE _____
- PRESSURE DROP - - - - -
- NATURAL CONVECTION
- DUMMY HEATER SIZE: 12.7 SQ
- DISSIPATED POWER:
- LPD3040-3B ~ -7B = 2.1(W)
- LPD3040-10B ~ -35B = 3.6(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

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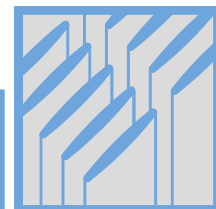
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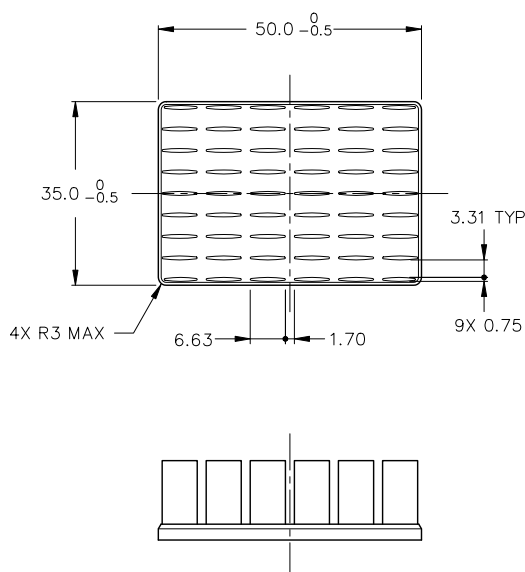
ALPHA

Low Pressure Drop Heat Sink

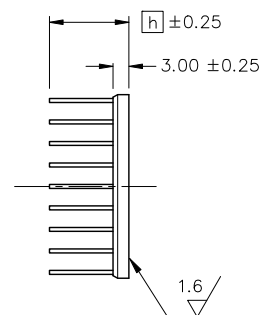
LPD3550



DIM

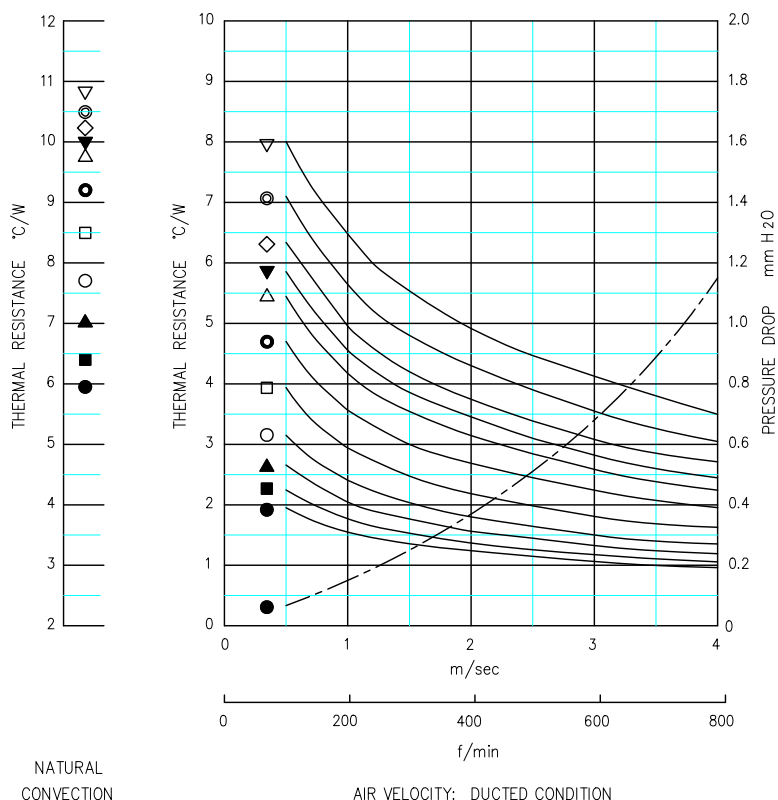


MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm



MODEL	HEIGHT [h]	WEIGHT (grams)
LPD3550-6B	6	15.6
LPD3550-7B	7	16.2
LPD3550-8B	8	16.8
LPD3550-9B	9	17.4
LPD3550-10B	10	18.0
LPD3550-12B	12	19.1
LPD3550-15B	15	20.9
LPD3550-20B	20	23.8
LPD3550-25B	25	26.7
LPD3550-30B	30	29.6
LPD3550-35B	35	32.5

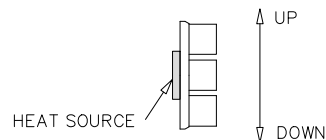
DATA



- ▽ LPD3550-6B
- LPD3550-7B
- ◇ LPD3550-8B
- ▼ LPD3550-9B
- △ LPD3550-10B
- LPD3550-12B
- LPD3550-15B
- LPD3550-20B
- ▲ LPD3550-25B
- LPD3550-30B
- LPD3550-35B

● DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP

● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 5.0 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

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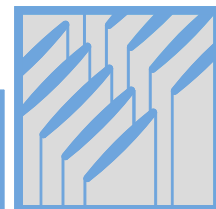
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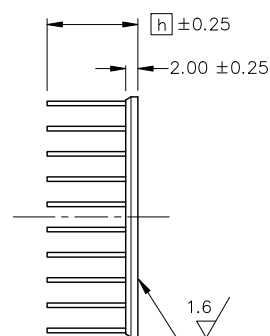
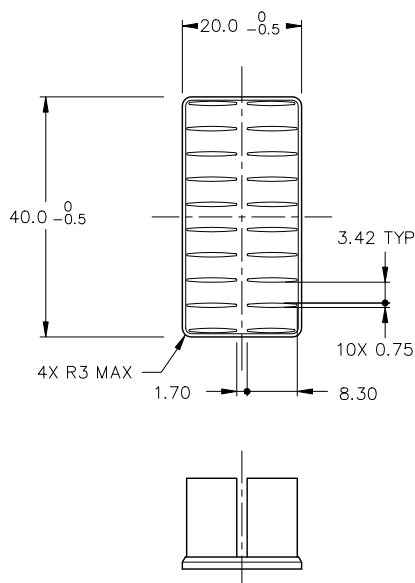
ALPHA

Low Pressure Drop Heat Sink

LPD4020



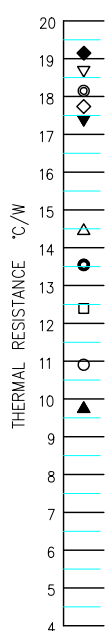
DIM



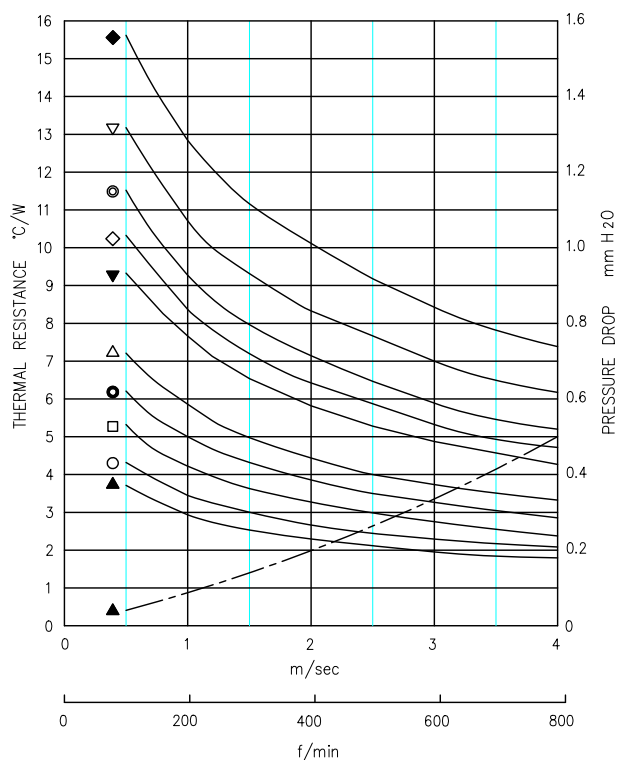
MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD4020-3B	3	4.5
LPD4020-4B	4	4.8
LPD4020-5B	5	5.0
LPD4020-6B	6	5.3
LPD4020-7B	7	5.6
LPD4020-10B	10	6.4
LPD4020-12B	12	6.9
LPD4020-15B	15	7.9
LPD4020-20B	20	9.1
LPD4020-25B	25	10.5

DATA



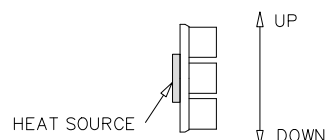
NATURAL
CONVECTION



AIR VELOCITY: DUCTED CONDITION

- ◆ LPD4020-3B
- ▽ LPD4020-4B
- ⊙ LPD4020-5B
- ◇ LPD4020-6B
- ▼ LPD4020-7B
- △ LPD4020-10B
- LPD4020-12B
- LPD4020-15B
- LPD4020-20B
- ▲ LPD4020-25B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER:
LPD4020-3B ~ -7B = 1.8(W)
LPD4020-10B ~ -25B = 2.9(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

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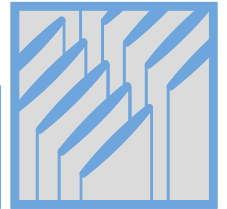
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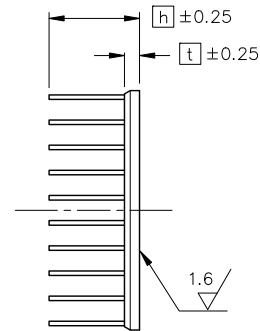
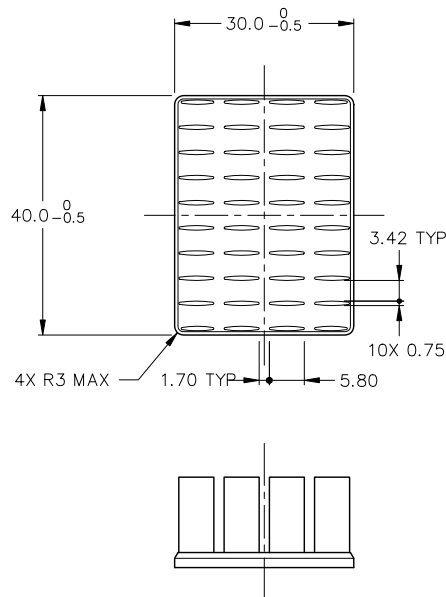
ALPHA

Low Pressure Drop Heat Sink

LPD 4030



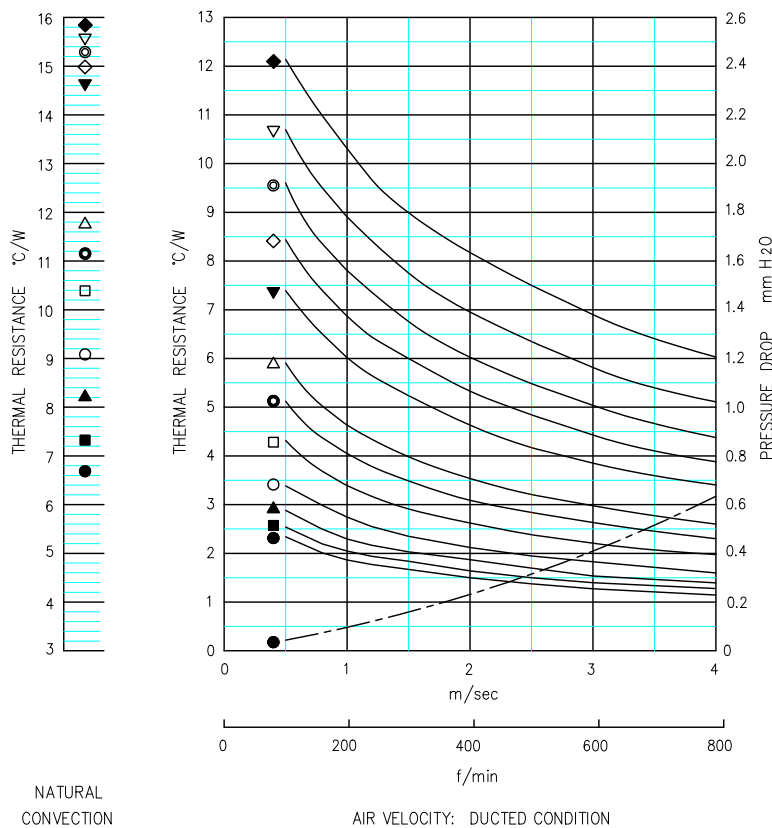
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

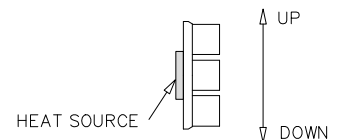
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD4030-3B	3	2.00	6.6
LPD4030-4B	4		7.0
LPD4030-5B	5		7.4
LPD4030-6B	6		7.7
LPD4030-7B	7		8.1
LPD4030-10B	10	2.50	10.6
LPD4030-12B	12		11.4
LPD4030-15B	15		12.5
LPD4030-20B	20		14.4
LPD4030-25B	25		16.3
LPD4030-30B	30		18.1
LPD4030-35B	35		20.0
LPD4030-[h]B	[h] ≤ 7	2.00	-
	7 < [h] ≤ 35	2.50	-

DATA



- ◆ LPD4030-3B
- ▽ LPD4030-4B
- ⊙ LPD4030-5B
- ◇ LPD4030-6B
- ▼ LPD4030-7B
- △ LPD4030-10B
- LPD4030-12B
- LPD4030-15B
- LPD4030-20B
- ▲ LPD4030-25B
- LPD4030-30B
- LPD4030-35B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE _____
PRESSURE DROP - - - - -
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER:
LPD4030-3B ~ -7B = 1.9(W)
LPD4030-10B ~ -35B = 3.7(W)



NOTE ORIENTATION OF HEAT SINK USED
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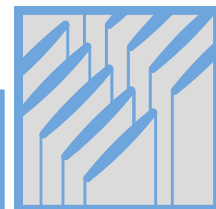
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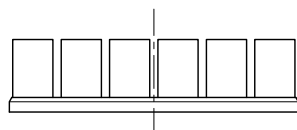
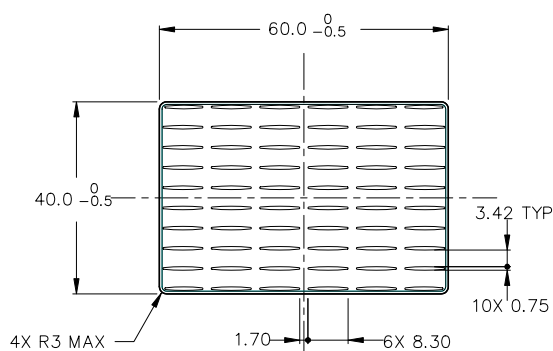
ALPHA

Low Pressure Drop Heat Sink

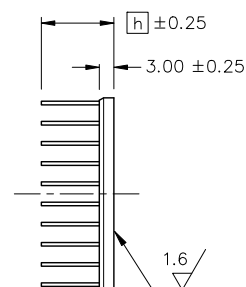
LPD 4060



DIM

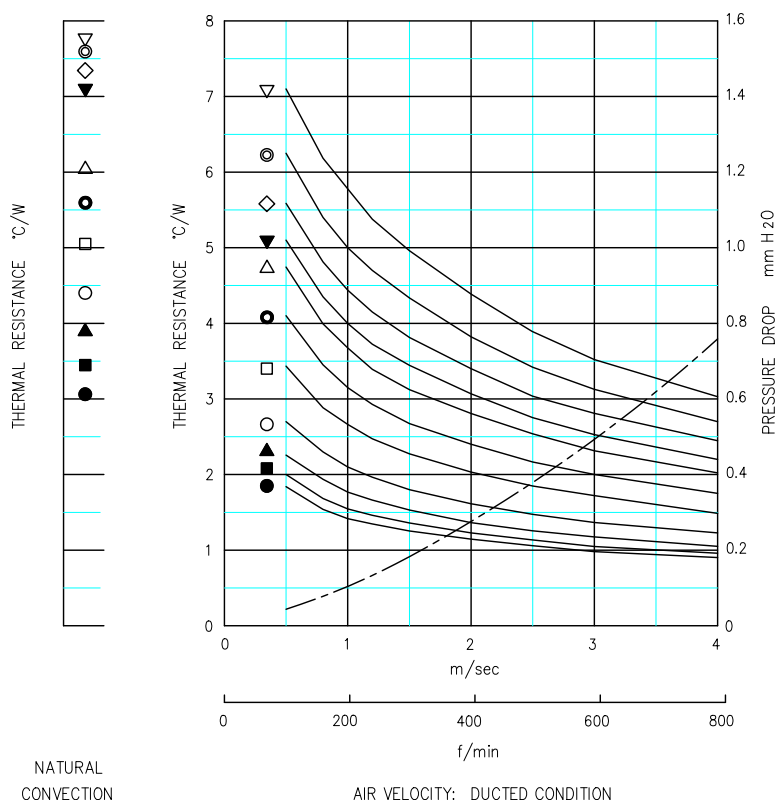


MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm



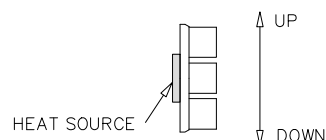
MODEL	HEIGHT [h]	WEIGHT (grams)
LPD4060-6B	6	21.5
LPD4060-7B	7	22.2
LPD4060-8B	8	23.0
LPD4060-9B	9	23.8
LPD4060-10B	10	24.5
LPD4060-12B	12	26.0
LPD4060-15B	15	28.3
LPD4060-20B	20	32.1
LPD4060-25B	25	35.9
LPD4060-30B	30	39.7
LPD4060-35B	35	43.5

DATA



- ▽ LPD4060-6B
- LPD4060-7B
- ◇ LPD4060-8B
- ▼ LPD4060-9B
- △ LPD4060-10B
- LPD4060-12B
- LPD4060-15B
- LPD4060-20B
- ▲ LPD4060-25B
- LPD4060-30B
- LPD4060-35B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER:
LPD4060-6B ~ -9B = 3.4(W)
LPD4060-10B ~ -35B = 5.5(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

- BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

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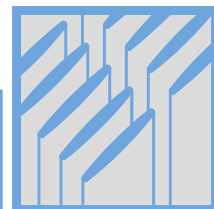
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

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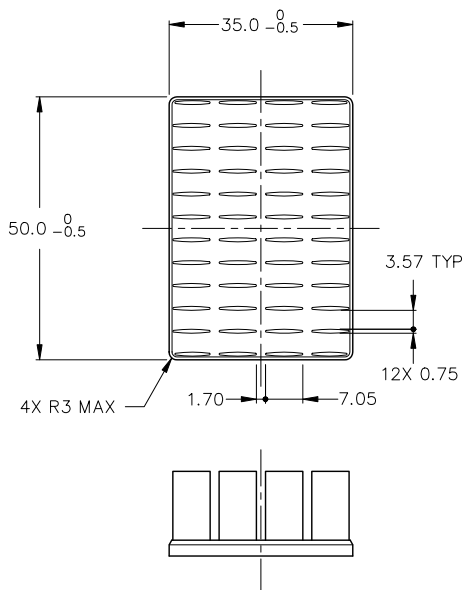
ALPHA

Low Pressure Drop Heat Sink

LPD5035



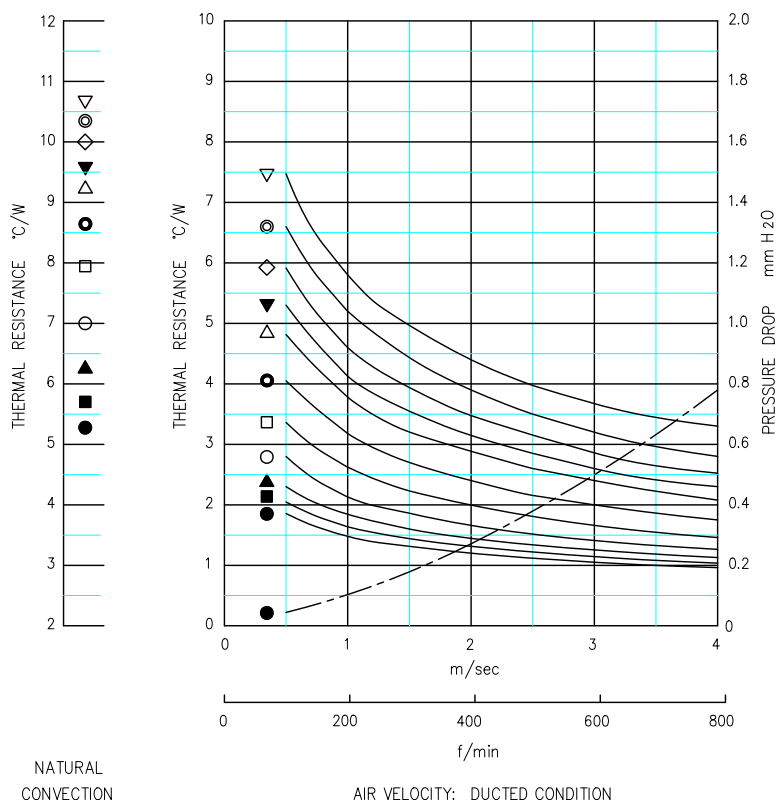
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD5035-6B	6	15.5
LPD5035-7B	7	16.1
LPD5035-8B	8	16.6
LPD5035-9B	9	17.2
LPD5035-10B	10	17.7
LPD5035-12B	12	18.8
LPD5035-15B	15	20.5
LPD5035-20B	20	23.2
LPD5035-25B	25	26.0
LPD5035-30B	30	28.8
LPD5035-35B	35	31.5

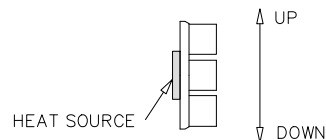
DATA



- ▽ LPD5035-6B
- LPD5035-7B
- ◇ LPD5035-8B
- ▼ LPD5035-9B
- △ LPD5035-10B
- LPD5035-12B
- LPD5035-15B
- LPD5035-20B
- ▲ LPD5035-25B
- LPD5035-30B
- LPD5035-35B

● DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE _____
PRESURE DROP - - - - -

● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 5.3 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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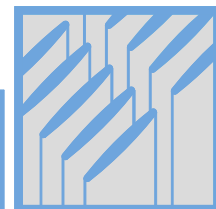
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

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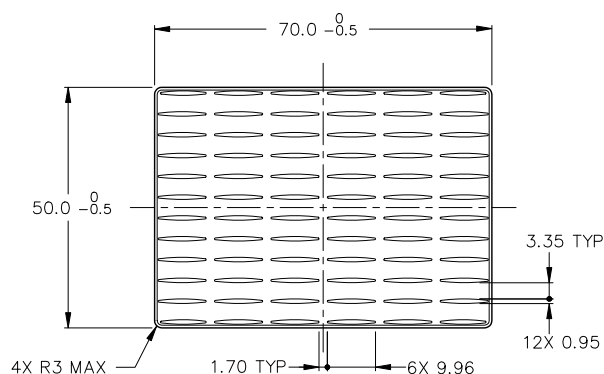
ALPHA

Low Pressure Drop Heat Sink

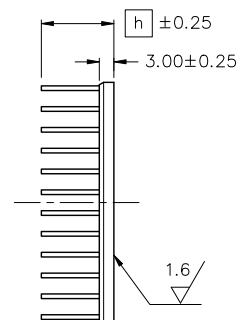
LPD5070



DIM

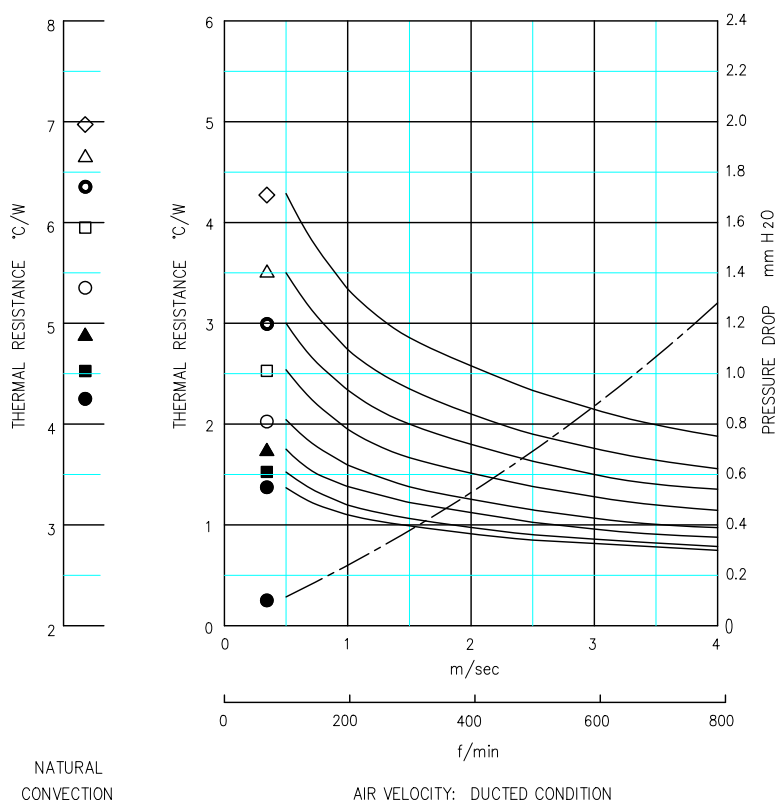


MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm



MODEL	HEIGHT [h]	WEIGHT (grams)
LPD5070-8B	8	35.2
LPD5070-10B	10	38.1
LPD5070-12B	12	40.9
LPD5070-15B	15	45.2
LPD5070-20B	20	52.3
LPD5070-25B	25	59.5
LPD5070-30B	30	66.6
LPD5070-35B	35	73.8

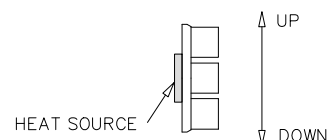
DATA



◇ LPD5070-8B ○ LPD5070-20B
△ LPD5070-10B ▲ LPD5070-25B
● LPD5070-12B ■ LPD5070-30B
□ LPD5070-15B ● LPD5070-35B

● DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE ———
PRESURE DROP - - - - -

● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 6.7 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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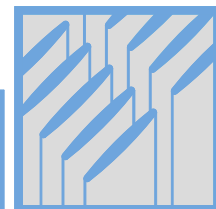
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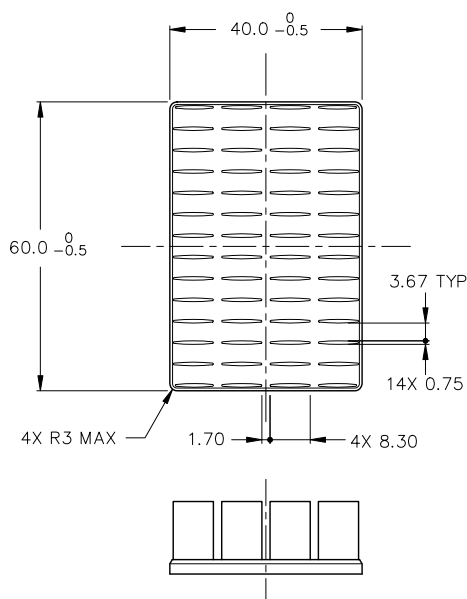
ALPHA

Low Pressure Drop Heat Sink

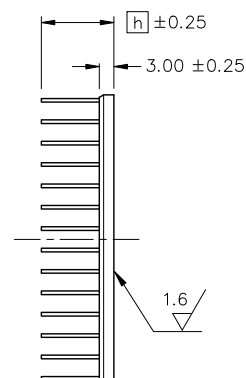
LPD6040



DIM

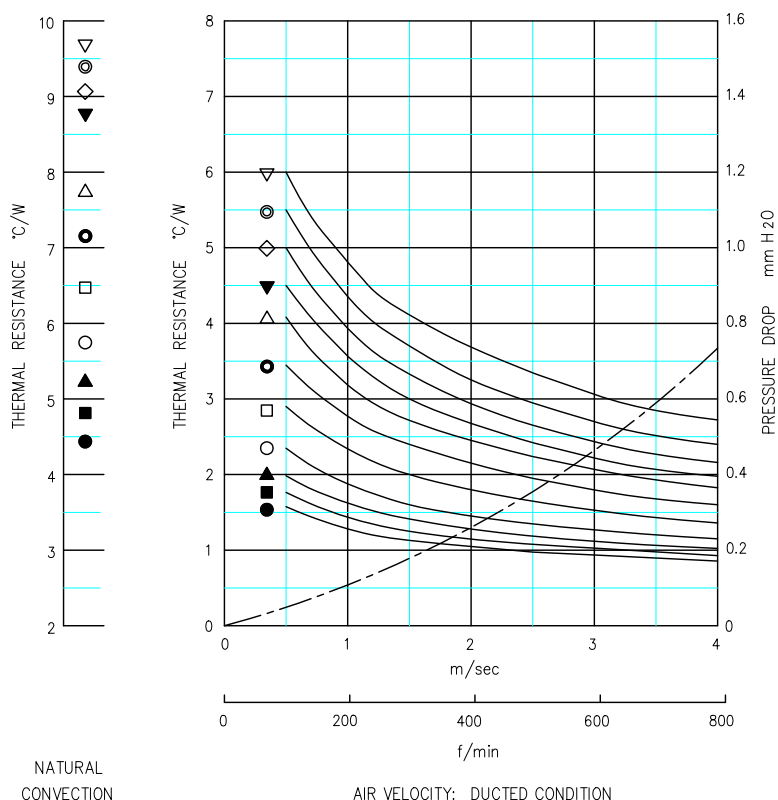


MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm



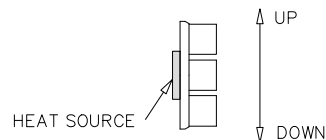
MODEL	HEIGHT [h]	WEIGHT (grams)
LPD6040-6B	6	21.6
LPD6040-7B	7	22.5
LPD6040-8B	8	23.3
LPD6040-9B	9	24.1
LPD6040-10B	10	24.9
LPD6040-12B	12	26.5
LPD6040-15B	15	29.0
LPD6040-20B	20	33.1
LPD6040-25B	25	37.1
LPD6040-30B	30	41.2
LPD6040-35B	35	45.3

DATA



- ▽ LPD6040-6B
- LPD6040-7B
- ◇ LPD6040-8B
- ▼ LPD6040-9B
- △ LPD6040-10B
- LPD6040-12B
- LPD6040-15B
- LPD6040-20B
- ▲ LPD6040-25B
- LPD6040-30B
- LPD6040-35B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESSURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER:
LPD6040-6B ~ -9B = 3.65(W)
LPD6040-10B ~ -35B = 6.0(W)



NOTE ORIENTATION OF HEAT SINK USED
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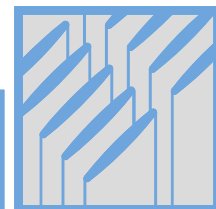
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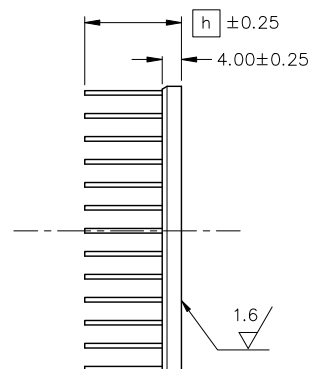
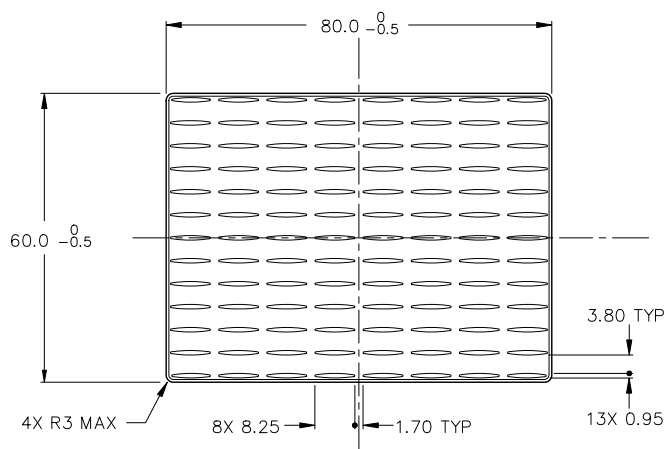
ALPHA

Low Pressure Drop Heat Sink

LPD6080



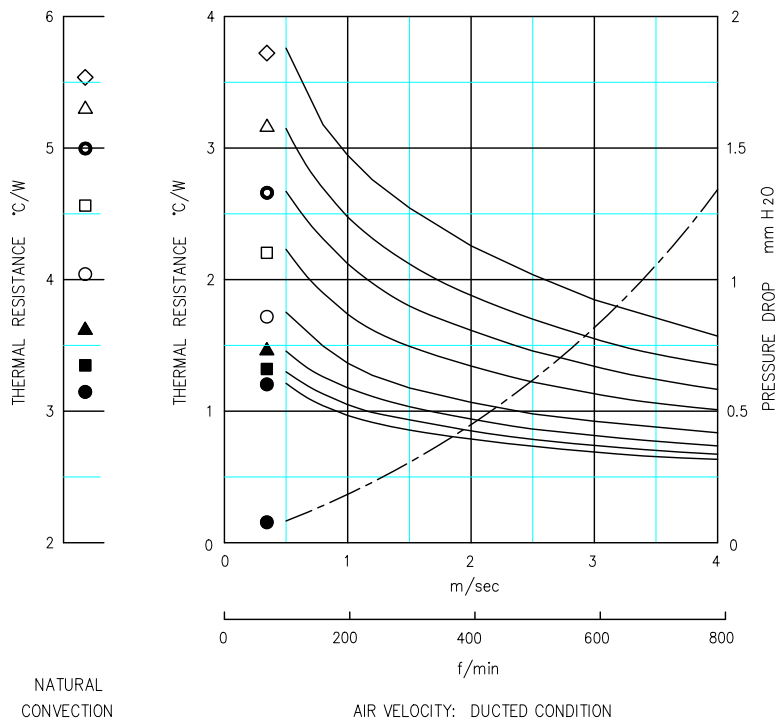
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
LPD6080-8B	8	58.2
LPD6080-10B	10	61.6
LPD6080-12B	12	65.0
LPD6080-15B	15	70.1
LPD6080-20B	20	78.6
LPD6080-25B	25	87.1
LPD6080-30B	30	95.6
LPD6080-35B	35	104.1

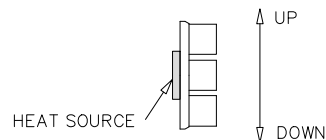
DATA



- ◇ LPD6080-8B ○ LPD6080-20B
- △ LPD6080-10B ▲ LPD6080-25B
- LPD6080-12B ■ LPD6080-30B
- LPD6080-15B ● LPD6080-35B

● DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE _____
PRESURE DROP - - - - -

● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 10.0 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

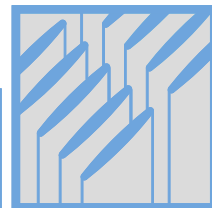
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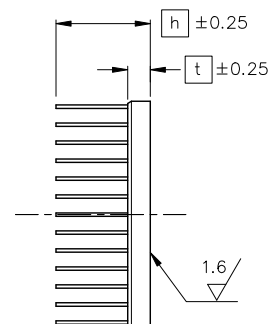
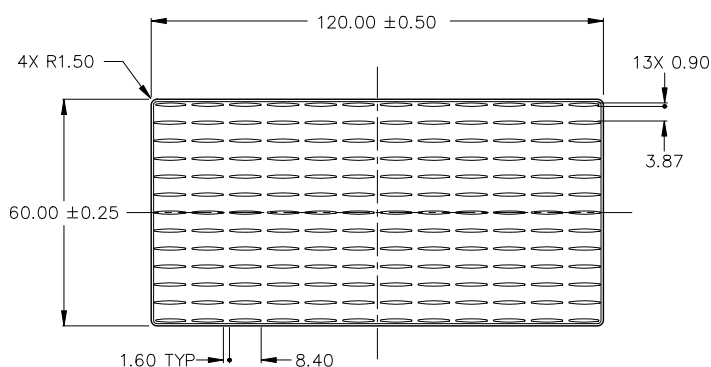
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ALPHA

Low Pressure Drop Heat Sink

LPD60120

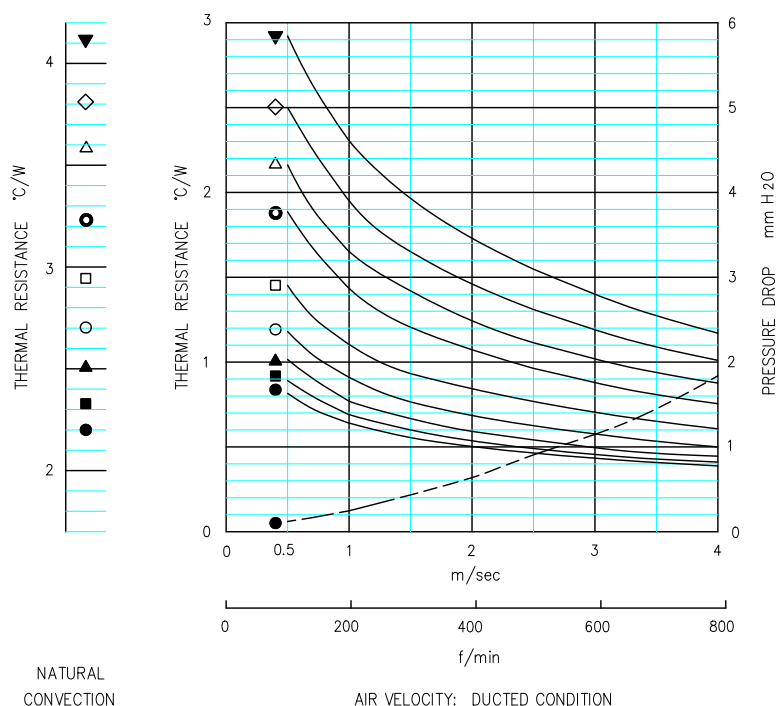
DIM



MATERIAL : A6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

MODEL	HEIGHT h	THICKNESS t	WEIGHT (grams)
LPD60120-8B	8	5.00	87.1
LPD60120-10B	10		92.1
LPD60120-12B	12		113.9
LPD60120-15B	15	6.00	138.2
LPD60120-20B	20		150.6
LPD60120-25B	25		163.0
LPD60120-30B	30		175.3
LPD60120-35B	35		187.7
LPD60120-40B	40		200.1
LPD60120- h B	$h \leq 12$	5.00	-
	$12 < h \leq 40$	6.00	-

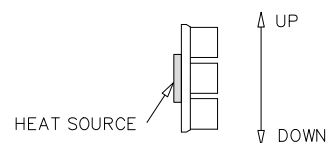
DATA



- ▼ LPD60120-8B ○ LPD60120-25B
- ◇ LPD60120-10B ▲ LPD60120-30B
- △ LPD60120-12B ■ LPD60120-35B
- LPD60120-15B ● LPD60120-40B
- LPD60120-20B

● DUCTED CONDITION
 DUMMY HEATER SIZE: 25.4 SQ
 THERMAL RESISTANCE _____
 PRESURE DROP - - - - -

● NATURAL CONVECTION
 DUMMY HEATER SIZE: 25.4 SQ
 DISSIPATED POWER: 16.5 (W)



NOTE ORIENTATION OF HEAT SINK USED
 FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
 REFER TO TECHNICAL INFORMATION.

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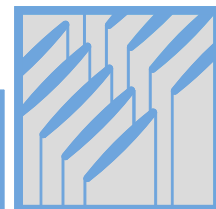
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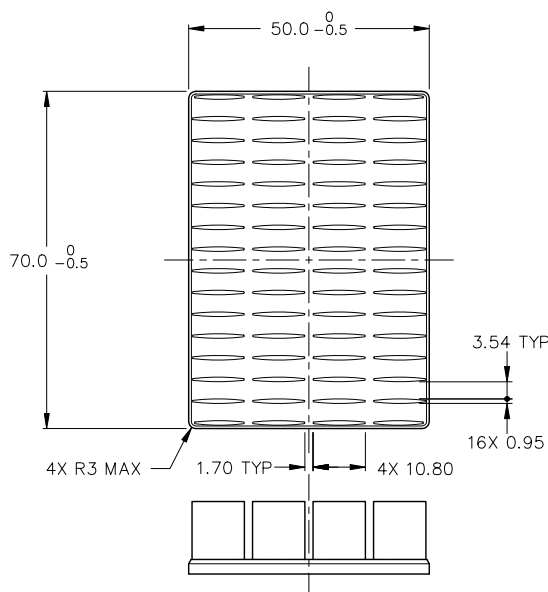
ALPHA

Low Pressure Drop Heat Sink

LPD 7050



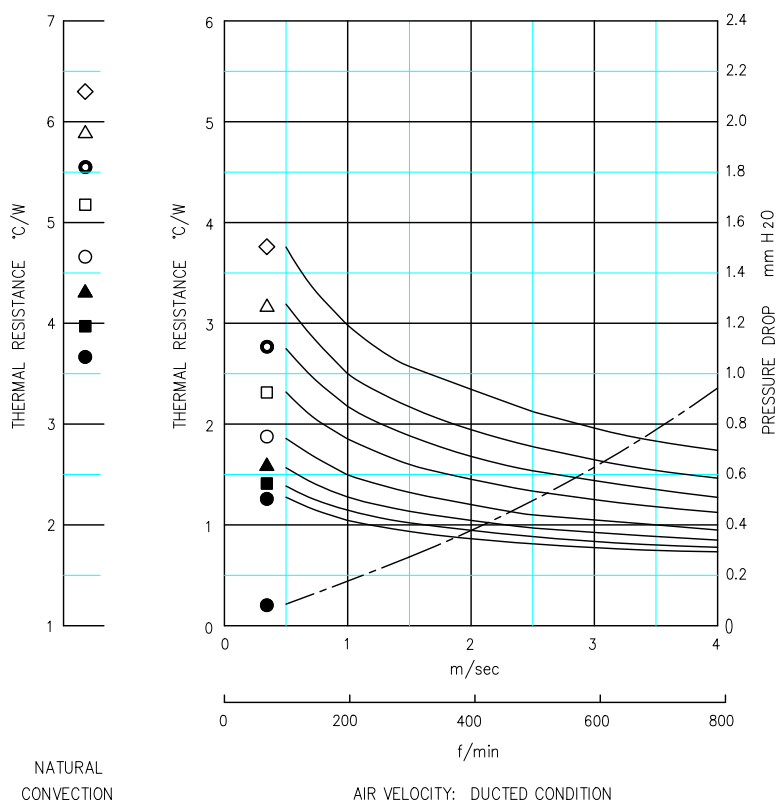
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

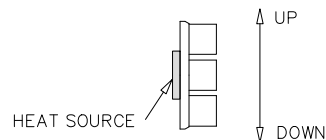
MODEL	HEIGHT [h]	WEIGHT (grams)
LPD7050-8B	8	35.0
LPD7050-10B	10	37.7
LPD7050-12B	12	40.5
LPD7050-15B	15	44.6
LPD7050-20B	20	51.5
LPD7050-25B	25	58.4
LPD7050-30B	30	65.3
LPD7050-35B	35	72.2

DATA



◇ LPD7050-8B ○ LPD7050-20B
△ LPD7050-10B ▲ LPD7050-25B
● LPD7050-12B ■ LPD7050-30B
□ LPD7050-15B ● LPD7050-35B

● DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE ———
PRESURE DROP - - -
● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 7.4 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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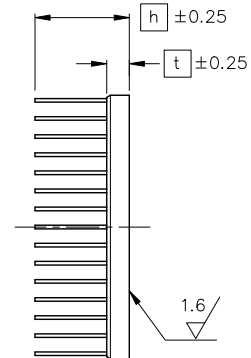
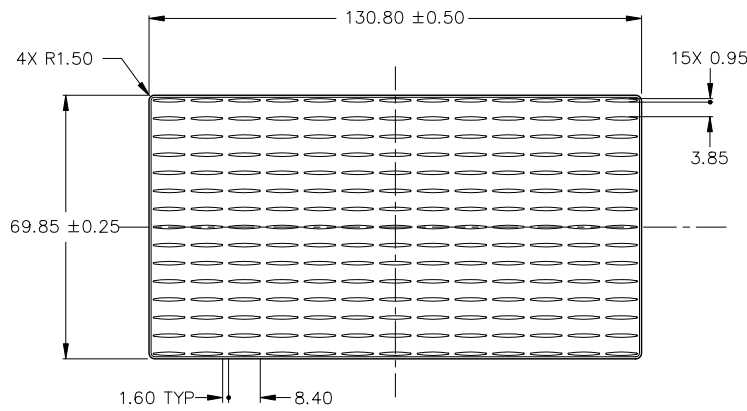
ALPHA

Low Pressure Drop Heat Sink

LPD70130



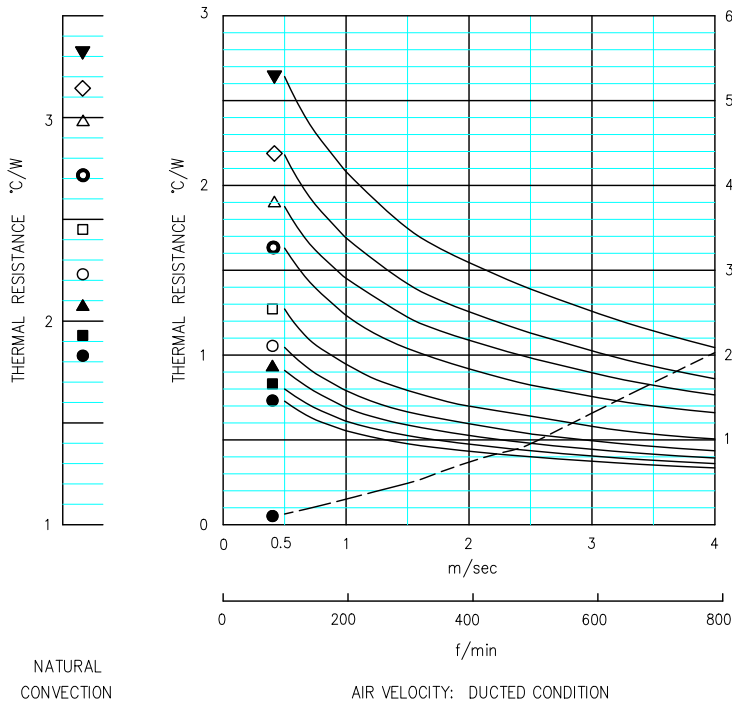
DIM



MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

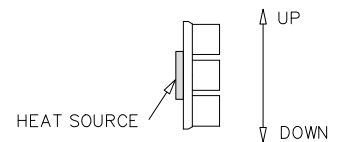
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD70130-8B	8	5.00	111.0
LPD70130-10B	10		117.5
LPD70130-12B	12		144.8
LPD70130-15B	15		178.0
LPD70130-20B	20	6.00	194.2
LPD70130-25B	25		210.4
LPD70130-30B	30		226.6
LPD70130-35B	35		242.8
LPD70130-40B	40		259.0
LPD70130-[h]B	[h] ≤ 12	5.00	-
	12 < [h] ≤ 40	6.00	-

DATA



- ▼ LPD70130-8B
- ◇ LPD70130-10B
- △ LPD70130-12B
- LPD70130-15B
- LPD70130-20B
- LPD70130-25B
- ▲ LPD70130-30B
- LPD70130-35B
- LPD70130-40B

- DUCTED CONDITION
DUMMY HEATER SIZE: 25.4 SQ
THERMAL RESISTANCE _____
PRESSURE DROP - - - - -
- NATURAL CONVECTION
DUMMY HEATER SIZE: 25.4 SQ
DISSIPATED POWER: 24 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

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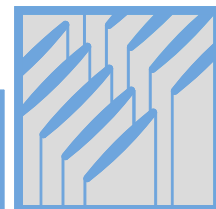
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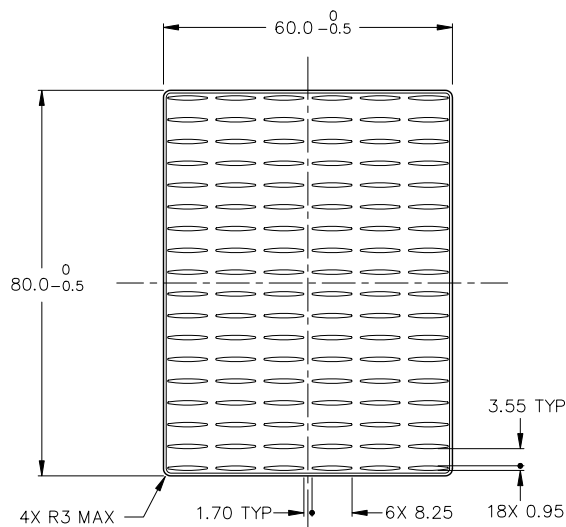
ALPHA

Low Pressure Drop Heat Sink

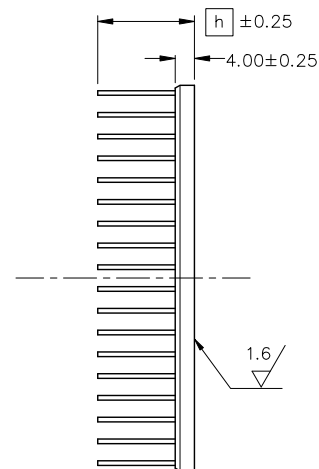
LPD8060



DIM

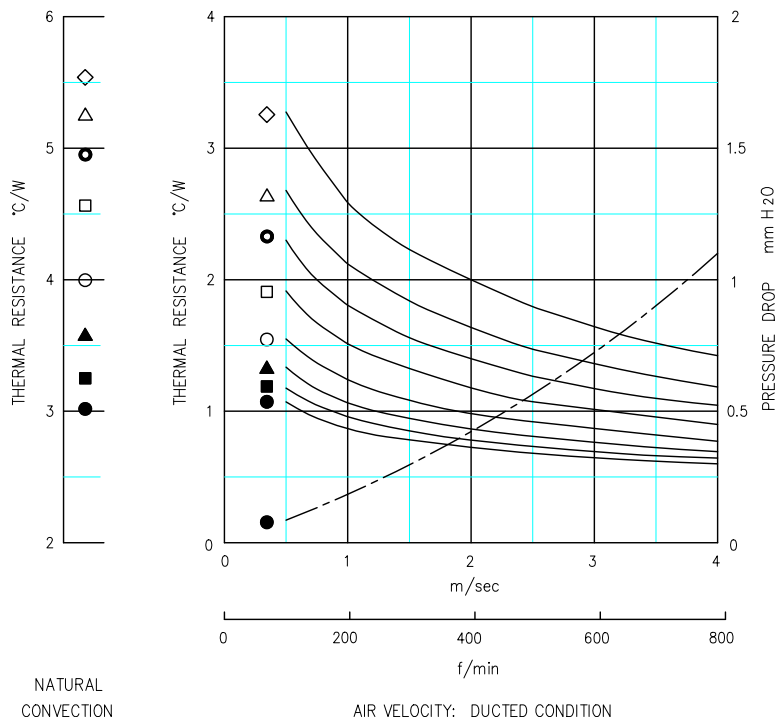


MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm



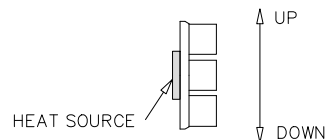
MODEL	HEIGHT [h]	WEIGHT (grams)
LPD8060-8B	8	58.5
LPD8060-10B	10	62.0
LPD8060-12B	12	65.5
LPD8060-15B	15	70.8
LPD8060-20B	20	79.7
LPD8060-25B	25	88.5
LPD8060-30B	30	97.3
LPD8060-35B	35	106.2

DATA



- ◇ LPD8060-8B
- △ LPD8060-10B
- LPD8060-12B
- LPD8060-15B
- LPD8060-20B
- ▲ LPD8060-25B
- LPD8060-30B
- LPD8060-35B

- DUCTED CONDITION
DUMMY HEATER SIZE: 12.7 SQ
THERMAL RESISTANCE
PRESURE DROP
- NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSPATED POWER: 10.2 (W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

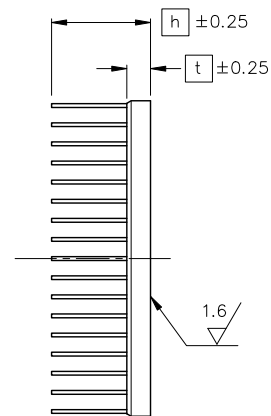
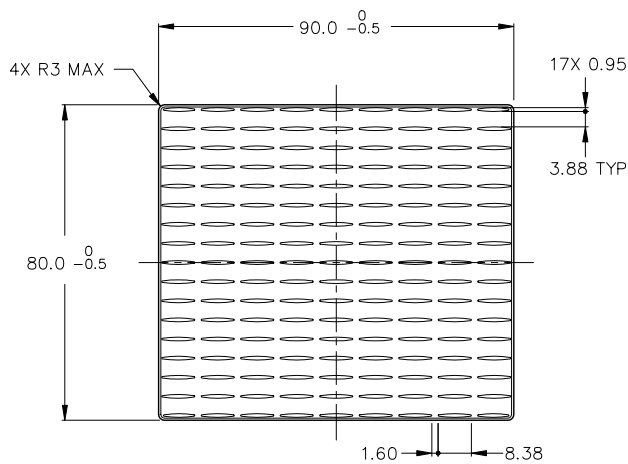
- BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

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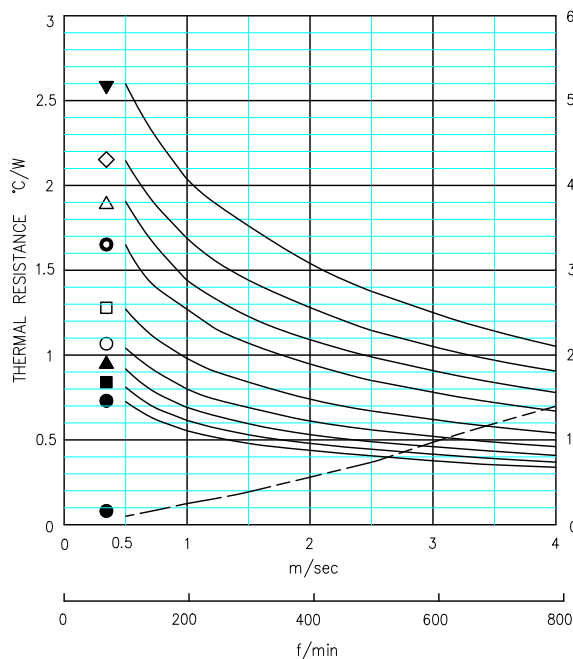
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MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

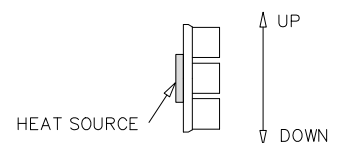
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD8090-8B	8	4.00	87.4
LPD8090-10B	10		92.5
LPD8090-12B	12		97.6
LPD8090-15B	15	6.00	138.7
LPD8090-20B	20		151.4
LPD8090-25B	25		164.1
LPD8090-30B	30		176.9
LPD8090-35B	35		189.6
LPD8090-40B	40		202.3
LPD8090- h [B]	$[h] \leq 12$	4.00	-
	$12 < [h] \leq 40$	6.00	-

NATURAL
CONVECTION

AIR VELOCITY: DUCTED CONDITION

- ▼ LPD8090-8B ○ LPD8090-25B
◇ LPD8090-10B ▲ LPD8090-30B
△ LPD8090-12B ■ LPD8090-35B
● LPD8090-15B ● LPD8090-40B
□ LPD8090-20B

- DUCTED CONDITION
DUMMY HEATER SIZE: 25.4 SQ
THERMAL RESISTANCE _____
PRESSURE DROP _____ - _____
- NATURAL CONVECTION
DUMMY HEATER SIZE: 25.4 SQ
DISSIPATED POWER: 15.0 (W)

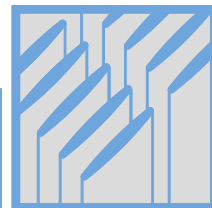


NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

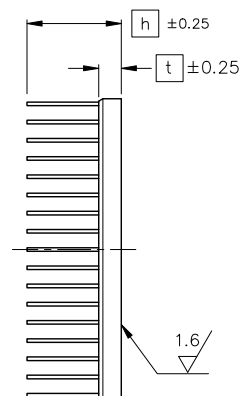
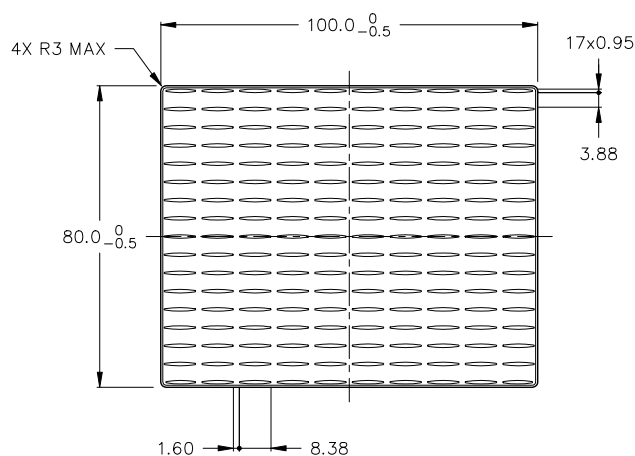
■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

ALPHA

Low Pressure Drop Heat Sink

LPD80100

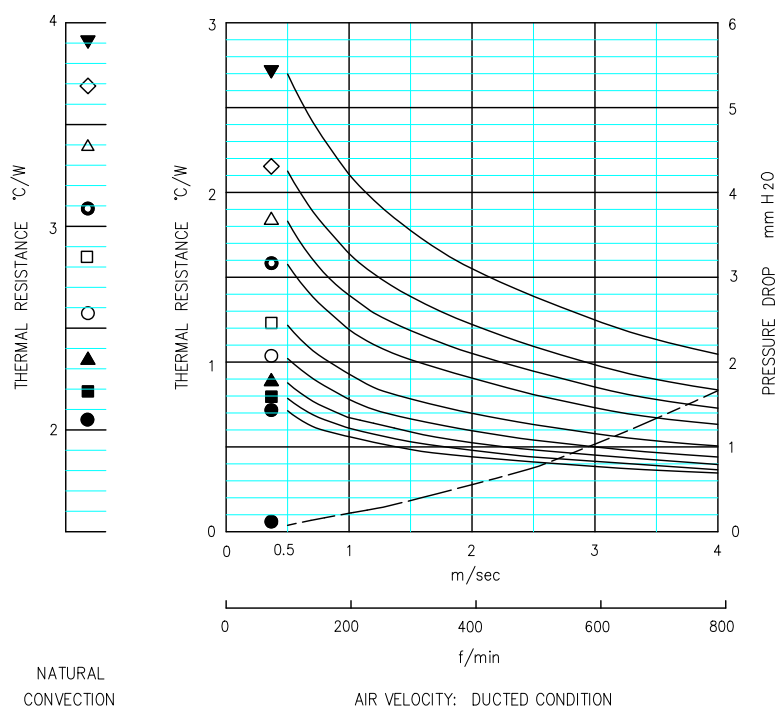
DIM



MATERIAL : A6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD80100-8B	8	4.00	97.1
LPD80100-10B	10		102.7
LPD80100-12B	12		108.4
LPD80100-15B	15	6.00	154.1
LPD80100-20B	20		168.2
LPD80100-25B	25		182.3
LPD80100-30B	30		196.4
LPD80100-35B	35		210.5
LPD80100-40B	40		224.6
LPD80100-[h]B	[h] ≤ 12	4.00	-
	12 < [h] ≤ 40	6.00	-

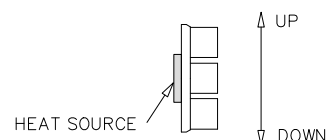
DATA



- ▼ LPD80100-8B ○ LPD80100-25B
 ◇ LPD80100-10B ▲ LPD80100-30B
 △ LPD80100-12B ■ LPD80100-35B
 ● LPD80100-15B ● LPD80100-40B
 □ LPD80100-20B

● DUCTED CONDITION
 DUMMY HEATER SIZE: 25.4 SQ
 THERMAL RESISTANCE _____
 PRESURE DROP - - - - -

● NATURAL CONVECTION
 DUMMY HEATER SIZE: 25.4 SQ
 DISSIPATED POWER: 14.7 (W)



NOTE ORIENTATION OF HEAT SINK USED
 FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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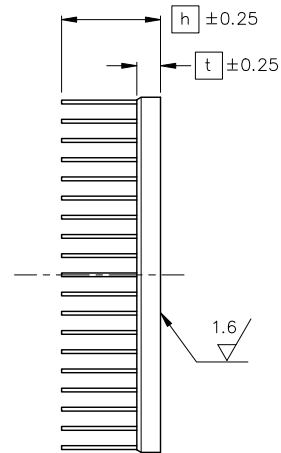
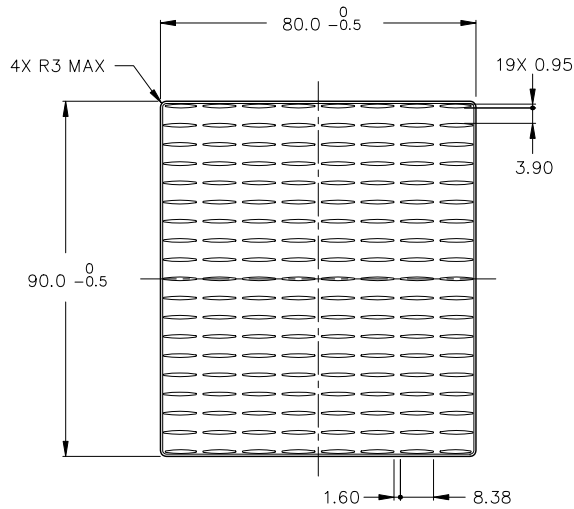
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ALPHA

Low Pressure Drop Heat Sink

LPD 9080

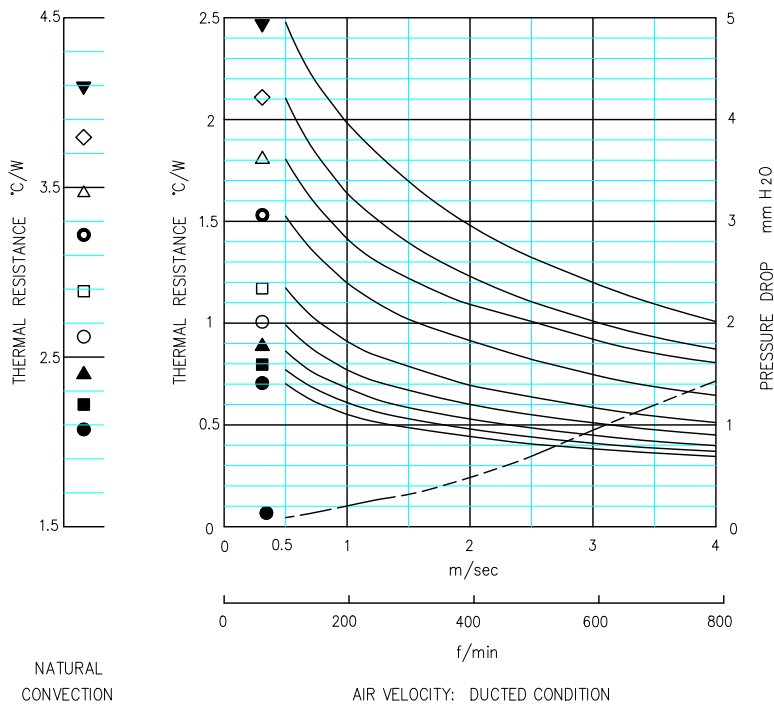
DIM



MATERIAL : A6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

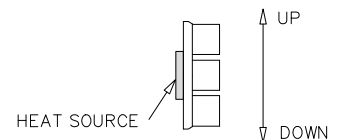
MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD9080-8B	8	4.00	87.3
LPD9080-10B	10		92.4
LPD9080-12B	12		97.4
LPD9080-15B	15		138.6
LPD9080-20B	20	6.00	151.2
LPD9080-25B	25		163.8
LPD9080-30B	30		176.5
LPD9080-35B	35		189.1
LPD9080-40B	40		201.7
LPD9080- h[B]	$h \leq 12$	4.00	-
	$12 < h \leq 40$	6.00	-

DATA



- ▼ LPD9080-8B
- ◇ LPD9080-10B
- △ LPD9080-12B
- LPD9080-15B
- LPD9080-20B
- LPD9080-25B
- ▲ LPD9080-30B
- LPD9080-35B
- LPD9080-40B

- DUCTED CONDITION
 DUMMY HEATER SIZE: 25.4 SQ
 THERMAL RESISTANCE _____
 PRESURE DROP - - - -
- NATURAL CONVECTION
 DUMMY HEATER SIZE: 25.4 SQ
 DISSIPATED POWER: 15.5 (W)



NOTE ORIENTATION OF HEAT SINK USED
 FOR NATURAL CONVECTION TESTING

- BASED ON ALPHA'S STANDARD TEST PROCEDURE.
 REFER TO TECHNICAL INFORMATION.

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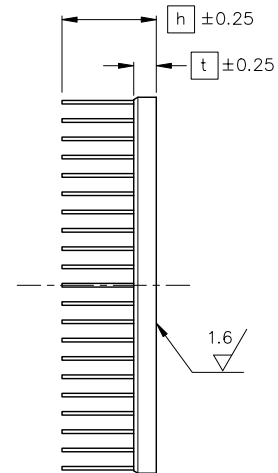
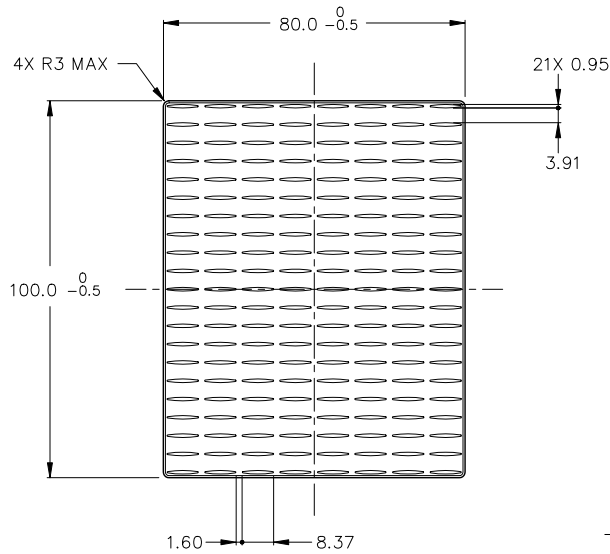
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ALPHA

Low Pressure Drop Heat Sink

LPD10080

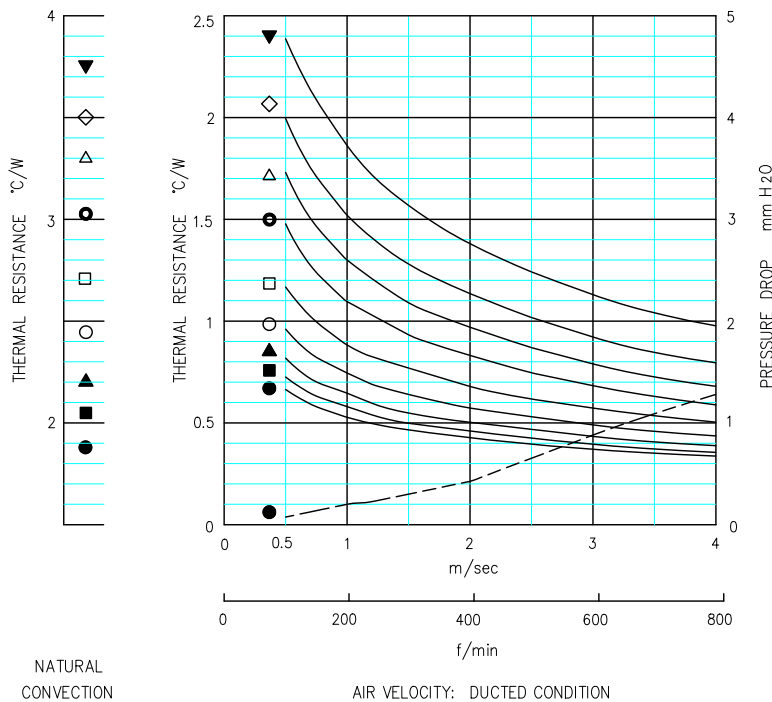
DIM



MATERIAL : A6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD10080-8B	8	4.00	97.1
LPD10080-10B	10		102.7
LPD10080-12B	12		108.4
LPD10080-15B	15	6.00	153.8
LPD10080-20B	20		167.8
LPD10080-25B	25		181.7
LPD10080-30B	30		195.6
LPD10080-35B	35		209.6
LPD10080-40B	40		223.5
LPD10080-[h]B	[h] ≤ 12	4.00	-
	12 < [h] ≤ 40	6.00	-

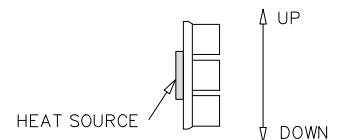
DATA



- ▼ LPD10080-8B ○ LPD10080-25B
 ◇ LPD10080-10B ▲ LPD10080-30B
 △ LPD10080-12B ■ LPD10080-35B
 ● LPD10080-15B ● LPD10080-40B
 □ LPD10080-20B

● DUCTED CONDITION
 DUMMY HEATER SIZE: 25.4 SQ
 THERMAL RESISTANCE _____
 PRESURE DROP - - - - -

● NATURAL CONVECTION
 DUMMY HEATER SIZE: 25.4 SQ
 DISSIPATED POWER: 15.3 (W)



NOTE ORIENTATION OF HEAT SINK USED
 FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
 REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

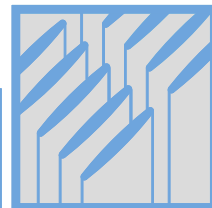
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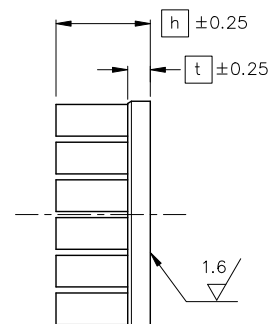
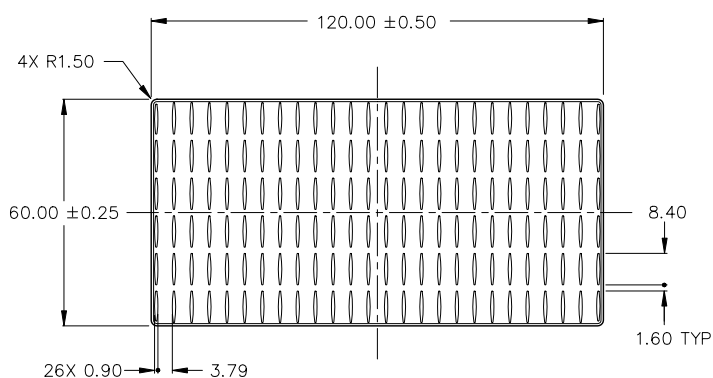
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ALPHA

Low Pressure Drop Heat Sink

LPD12060

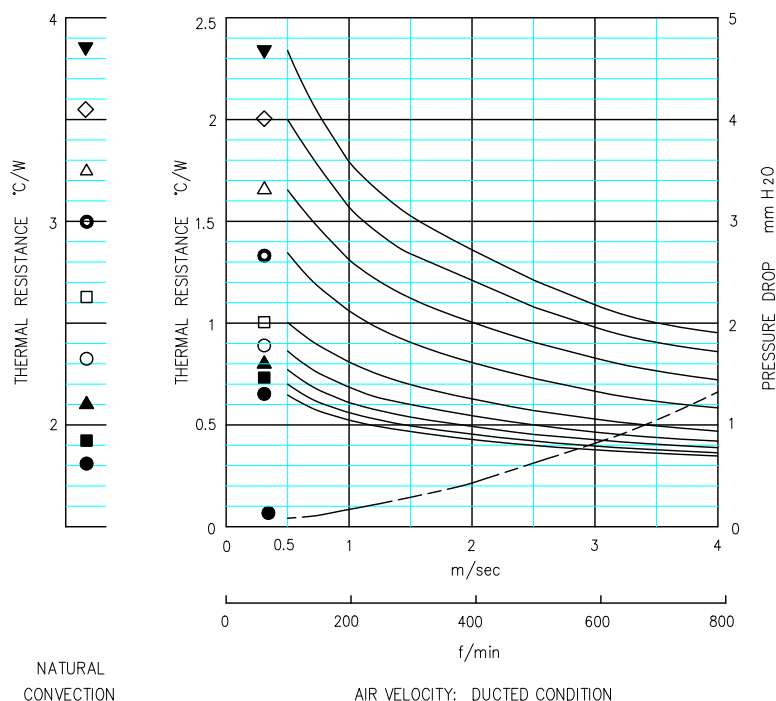
DIM



MATERIAL : A6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

MODEL	HEIGHT h	THICKNESS t	WEIGHT (grams)
LPD12060-8B	8	5.00	87.1
LPD12060-10B	10		92.1
LPD12060-12B	12		113.9
LPD12060-15B	15		138.2
LPD12060-20B	20	6.00	150.6
LPD12060-25B	25		163.0
LPD12060-30B	30		175.3
LPD12060-35B	35		187.7
LPD12060-40B	40		200.1
LPD12060- h B	$h \leq 12$	5.00	-
	$12 < h \leq 40$	6.00	-

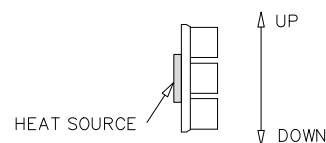
DATA



- ▼ LPD12060-8B ○ LPD12060-25B
- ◇ LPD12060-10B ▲ LPD12060-30B
- △ LPD12060-12B ■ LPD12060-35B
- LPD12060-15B ● LPD12060-40B
- LPD12060-20B

● DUCTED CONDITION
 DUMMY HEATER SIZE: 25.4 SQ
 THERMAL RESISTANCE _____
 PRESURE DROP - - - - -

● NATURAL CONVECTION
 DUMMY HEATER SIZE: 25.4 SQ
 DISSIPATED POWER: 18.5 (W)



NOTE ORIENTATION OF HEAT SINK USED
 FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
 REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

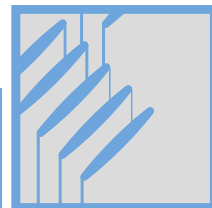
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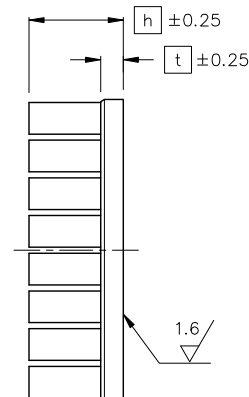
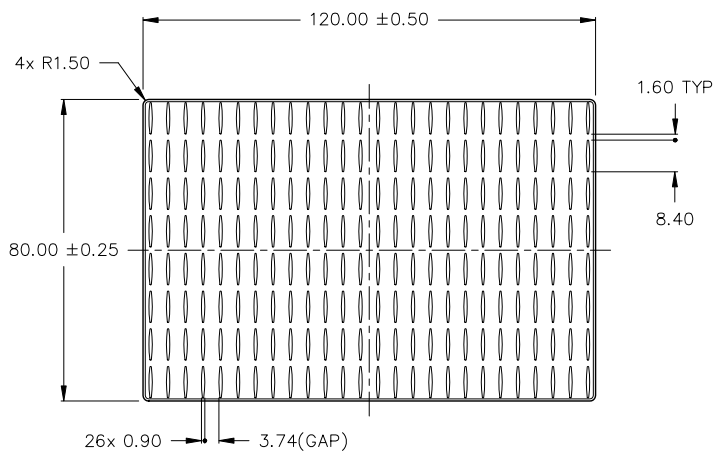
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ALPHA

Low Pressure Drop Heat Sink

LPD12080

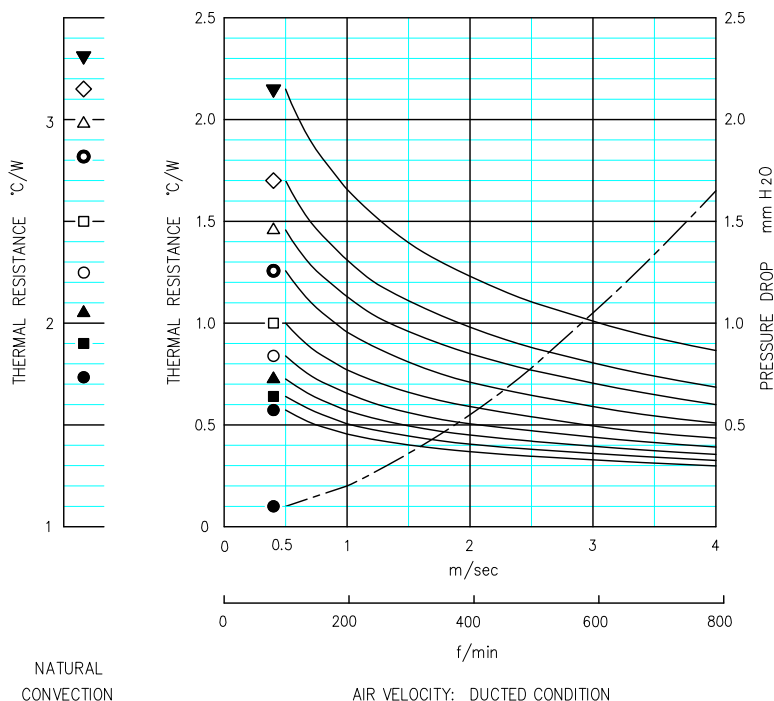
DIM



MATERIAL : A6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
LPD12080-8B	8	4.00	116.6
LPD12080-10B	10	4.00	123.2
LPD12080-12B	12	5.00	152.5
LPD12080-15B	15	6.00	185.0
LPD12080-20B	20		201.6
LPD12080-25B	25		218.2
LPD12080-30B	30		234.7
LPD12080-35B	35		251.3
LPD12080-40B	40		267.9
LPD12080-[h]B	[h] ≤ 10	4.00	-
	10 < [h] ≤ 12	5.00	-
	12 < [h] ≤ 40	6.00	-

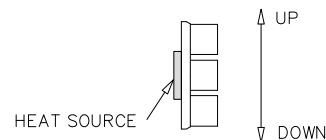
DATA



- ▼ LPD12080-8B ○ LPD12080-25B
- ◇ LPD12080-10B ▲ LPD12080-30B
- △ LPD12080-12B ■ LPD12080-35B
- LPD12080-15B ● LPD12080-40B
- LPD12080-20B

● DUCTED CONDITION
 DUMMY HEATER SIZE: 25.4 SQ
 THERMAL RESISTANCE ———
 PRESURE DROP - - -

● NATURAL CONVECTION
 DUMMY HEATER SIZE: 25.4 SQ
 DISSIPATED POWER: 24 (W)



NOTE ORIENTATION OF HEAT SINK USED
 FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
 REFER TO TECHNICAL INFORMATION.

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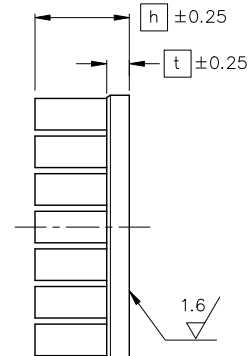
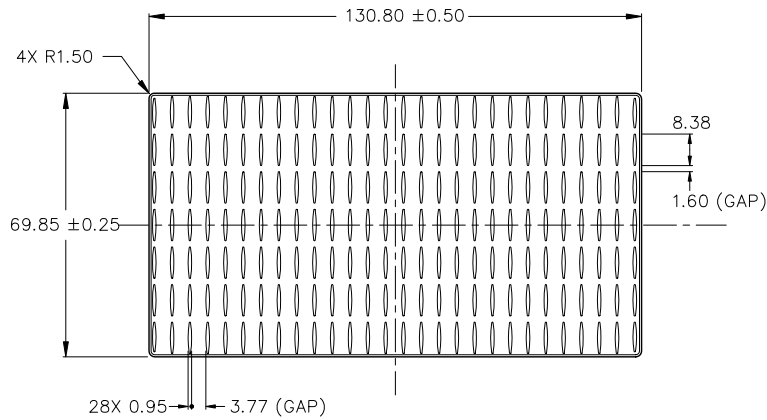
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ALPHA

Low Pressure Drop Heat Sink

LPD13070

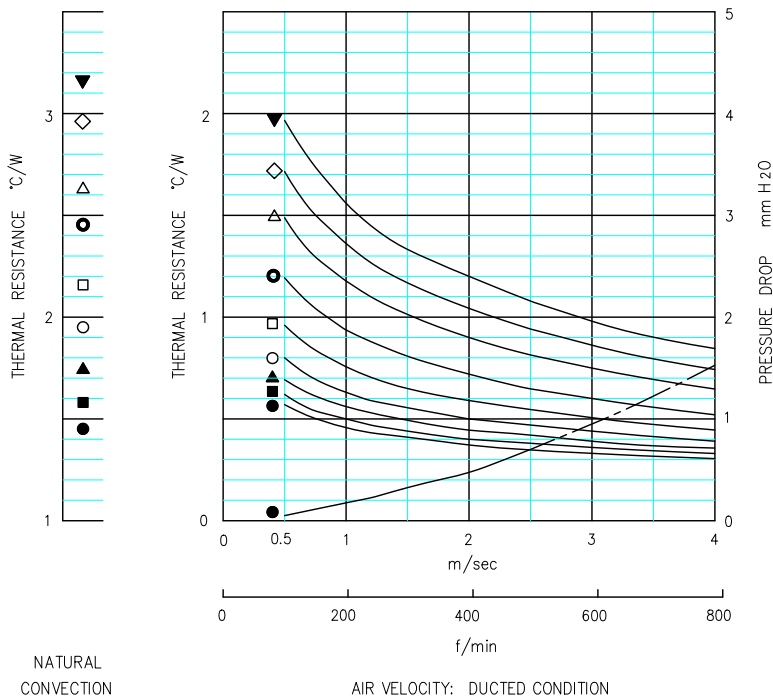
DIM



MATERIAL : A6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

MODEL	HEIGHT h	THICKNESS t	WEIGHT (grams)
LPD13070-8B	8	5.00	111.0
LPD13070-10B	10		117.5
LPD13070-12B	12		144.9
LPD13070-15B	15		175.8
LPD13070-20B	20	6.00	194.1
LPD13070-25B	25		208.4
LPD13070-30B	30		224.7
LPD13070-35B	35		240.9
LPD13070-40B	40		257.2
LPD13070- h B	$h \leq 12$	5.00	-
	$12 < h \leq 40$	6.00	-

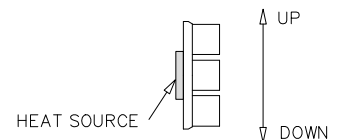
DATA



- ▼ LPD13070-8B ○ LPD13070-25B
- ◇ LPD13070-10B ▲ LPD13070-30B
- △ LPD13070-12B ■ LPD13070-35B
- LPD13070-15B ● LPD13070-40B
- LPD13070-20B

● DUCTED CONDITION
 DUMMY HEATER SIZE: 25.4 SQ
 THERMAL RESISTANCE _____
 PRESURE DROP - - - - -

● NATURAL CONVECTION
 DUMMY HEATER SIZE: 25.4 SQ
 DISSIPATED POWER: 24 (W)



NOTE ORIENTATION OF HEAT SINK USED
 FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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