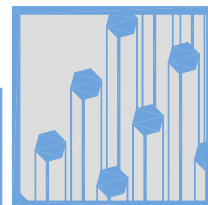


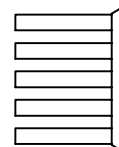
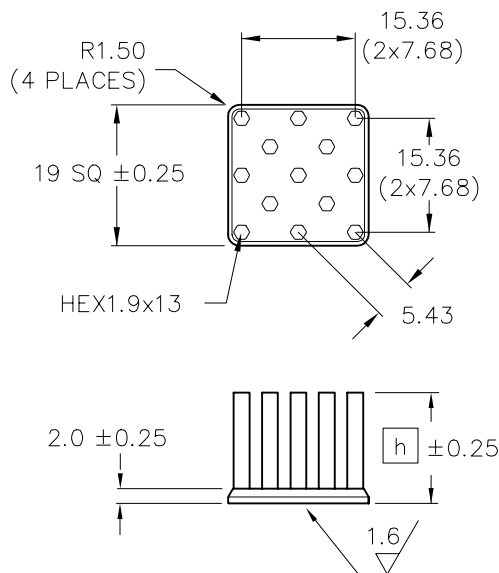
N Series

Natural Convection Heat Sink

ALPHA

ALPHA**Natural Convection Heat Sink****N19**

DIM

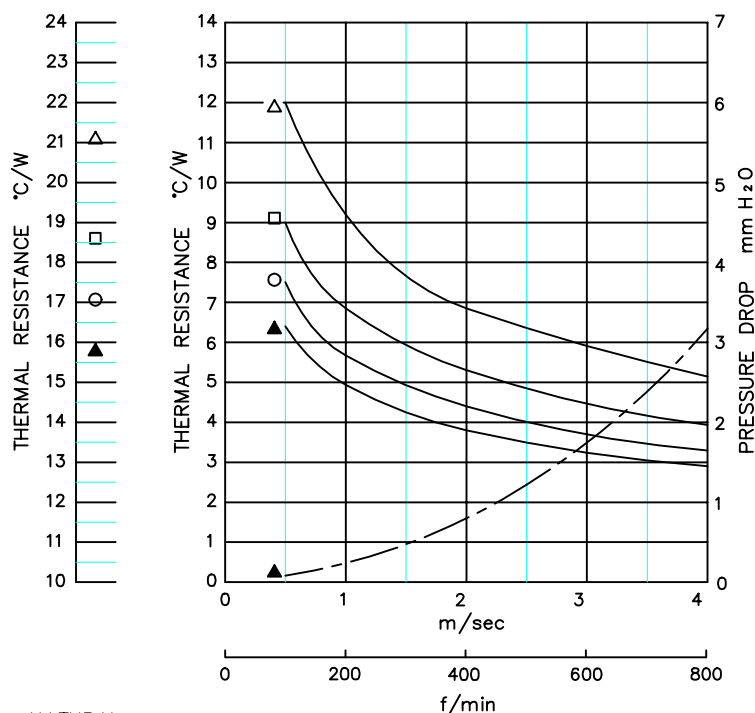


HEAT SINK
MATERIAL : A 6063
FINISH : BLACK ANODIZE

MODEL	HEIGHT [h]	WEIGHT (grams)
N19-10B	10	2.8
N19-15B	15	3.3
N19-20B	20	3.8
N19-25B	25	4.3

Dimensions : mm

DATA

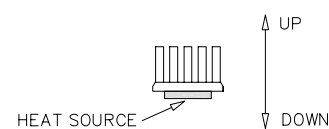
NATURAL
CONVECTION

AIR VELOCITY: DUCTED CONDITION

- △ N19-10B
- N19-15B
- N19-20B
- ▲ N19-25B

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

● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 3.0(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

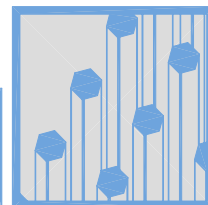
■ BASED ON ALPHA'S STANDARD TEST
PROCEDURE.
REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

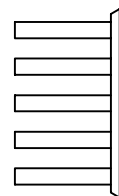
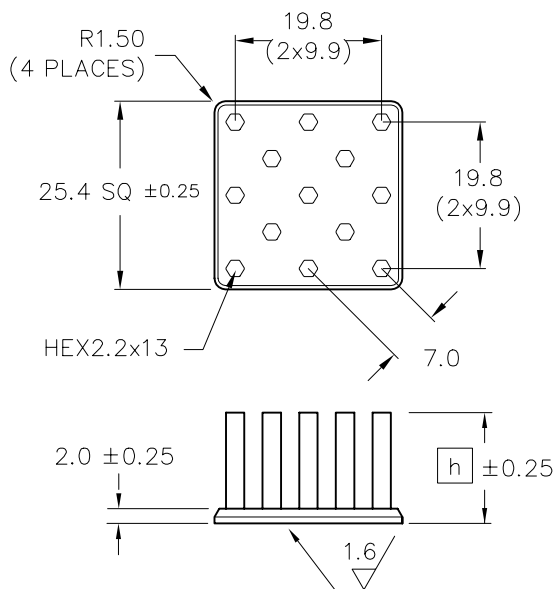
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ALPHA**Natural Convection Heat Sink****N25**

DIM

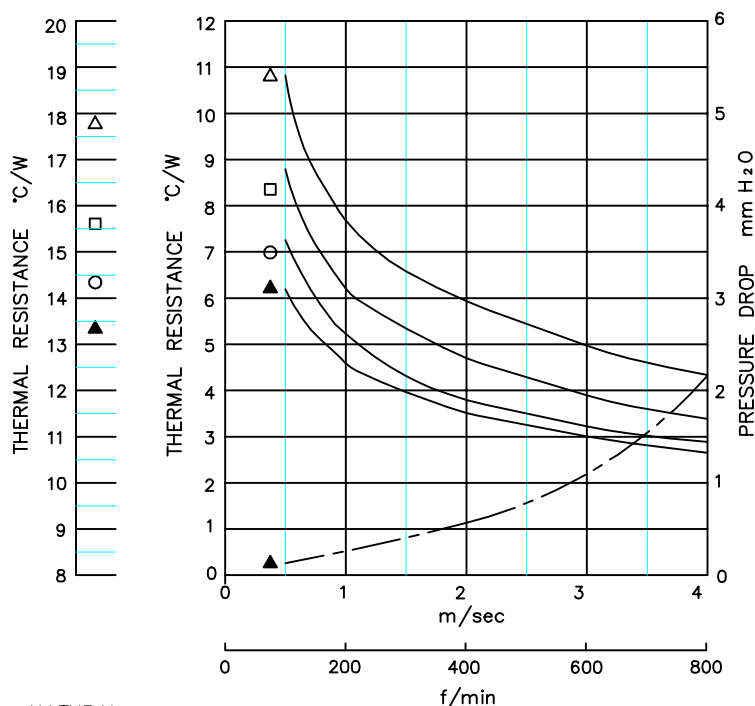


HEAT SINK
 MATERIAL : A 6063
 FINISH : BLACK ANODIZE

MODEL	HEIGHT [h]	WEIGHT (grams)
N25-10B	10	4.6
N25-15B	15	5.3
N25-20B	20	6.0
N25-25B	25	6.7

Dimensions : mm

DATA



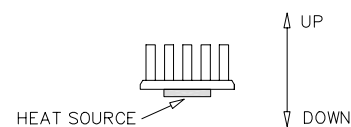
NATURAL
CONVECTION

AIR VELOCITY: DUCTED CONDITION

- △ N25-10B
- N25-15B
- N25-20B
- ▲ N25-25B

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

● NATURAL CONVECTION
 DUMMY HEATER SIZE: 12.7 SQ
 DISSIPATED POWER: 3.5(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

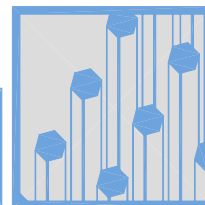
■ BASED ON ALPHA'S STANDARD TEST
PROCEDURE.
REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

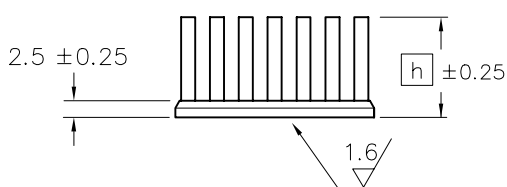
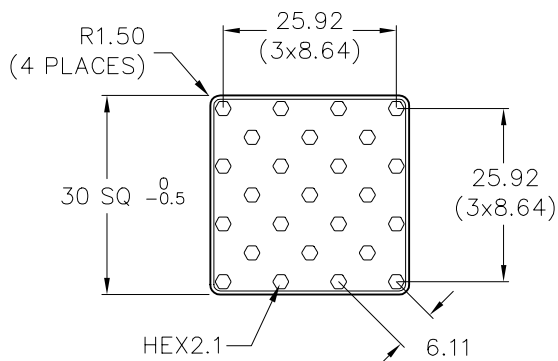
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ALPHA**Natural Convection Heat Sink****N30**

DIM

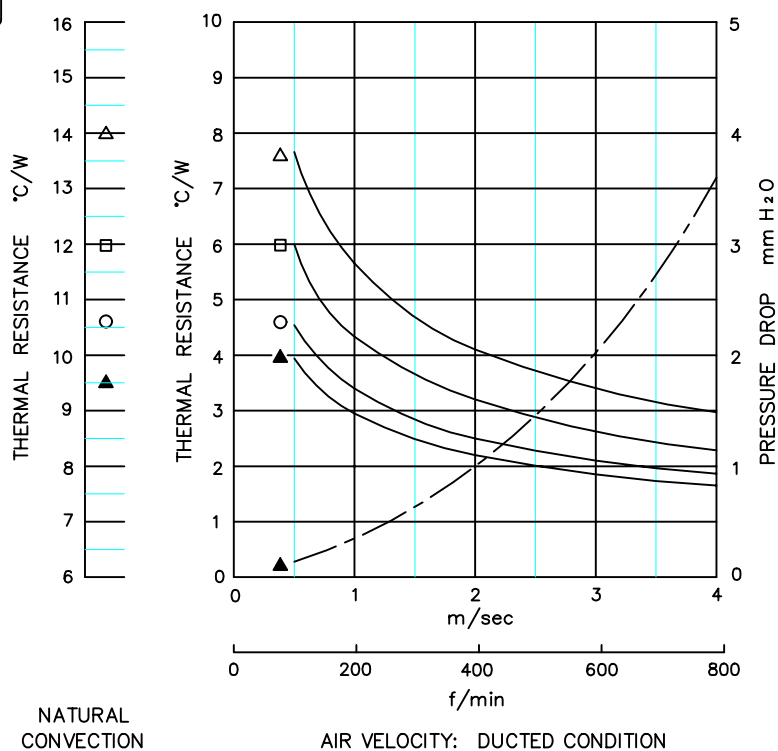


HEAT SINK
MATERIAL : A 6063
FINISH : BLACK ANODIZE

MODEL	HEIGHT [h]	WEIGHT (grams)
N30-10B	10	7.8
N30-15B	15	9.2
N30-20B	20	10.6
N30-25B	25	12.0

Dimensions : mm

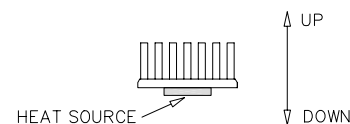
DATA



- △ N30-10B
- N30-15B
- N30-20B
- ▲ N30-25B

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

● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 4.9(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

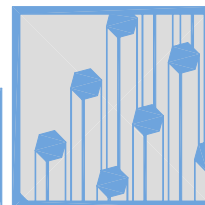
■ BASED ON ALPHA'S STANDARD TEST
PROCEDURE.
REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

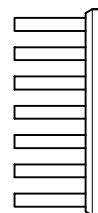
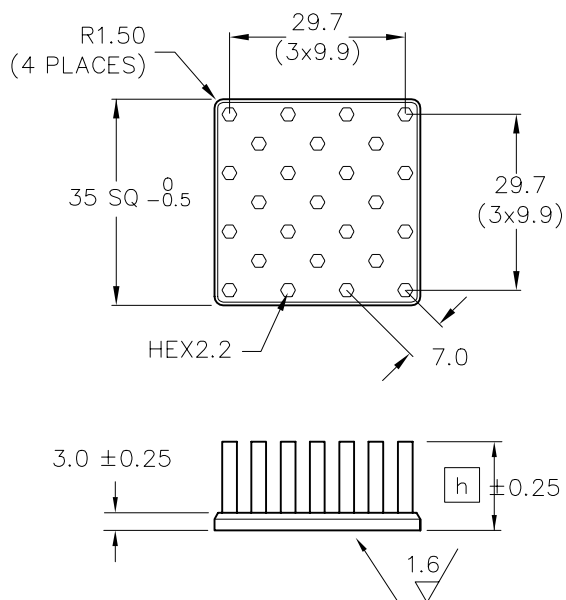
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ALPHA**Natural Convection Heat Sink****N35**

DIM

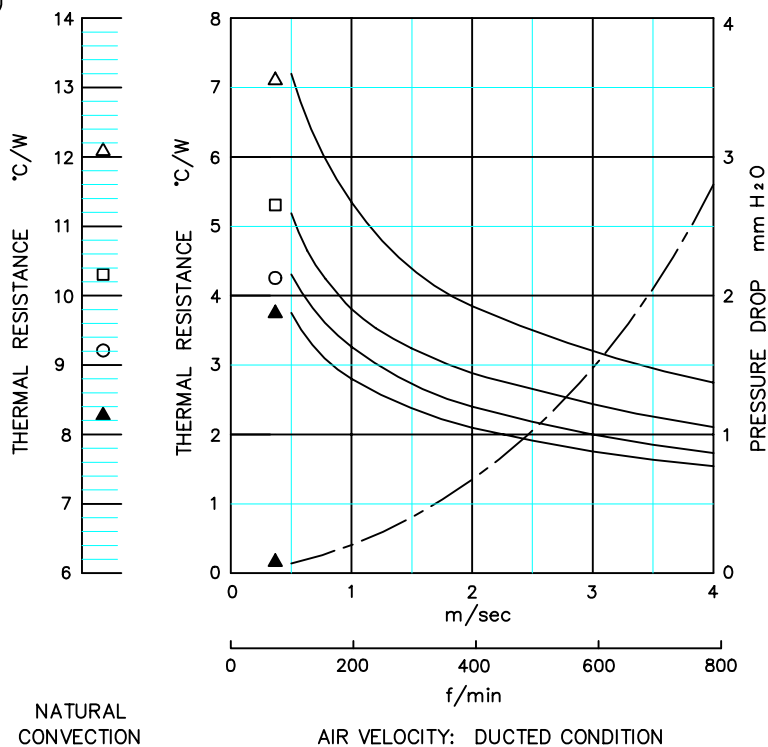


HEAT SINK
MATERIAL : A 6063
FINISH : BLACK ANODIZE

MODEL	HEIGHT [h]	WEIGHT (grams)
N35-10B	10	11.7
N35-15B	15	13.1
N35-20B	20	14.5
N35-25B	25	15.9

Dimensions : mm

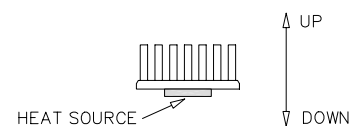
DATA



- △ N35-10B
- N35-15B
- N35-20B
- ▲ N35-25B

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

● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 5.7(W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

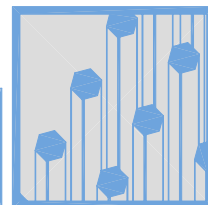
■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

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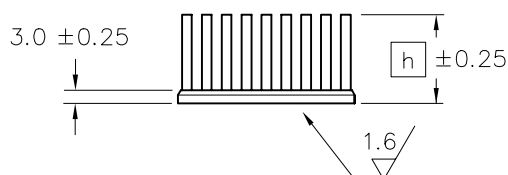
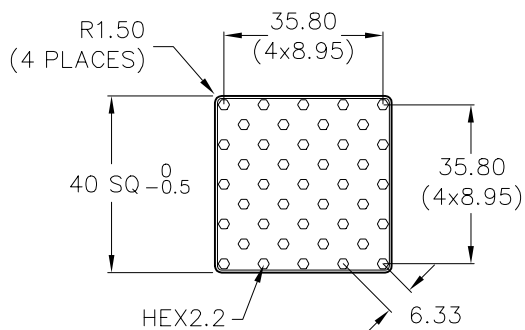
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ALPHA**Natural Convection Heat Sink****N40**

DIM

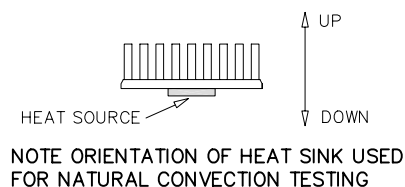
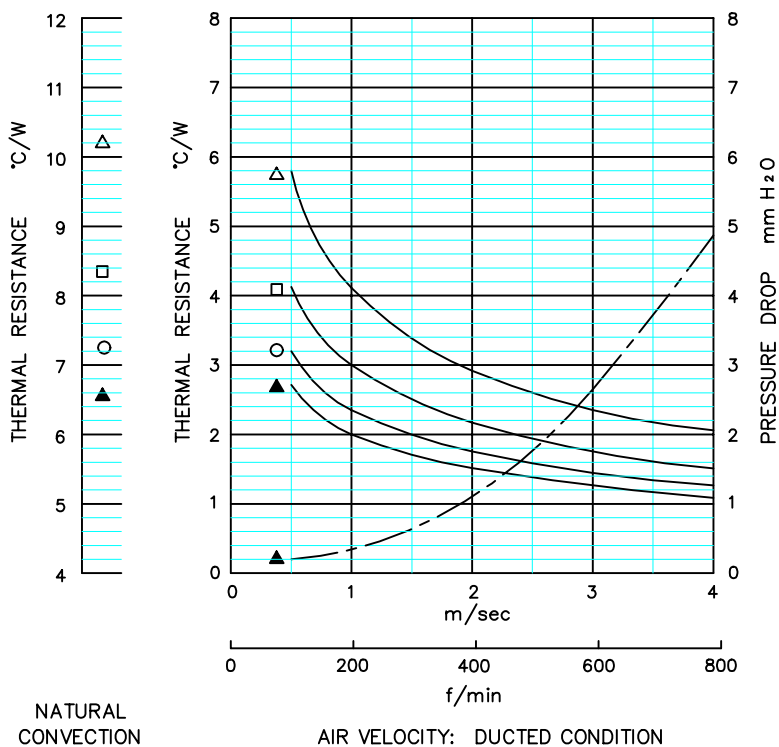


HEAT SINK
MATERIAL : A 6063
FINISH : BLACK ANODIZE

MODEL	HEIGHT [h]	WEIGHT (grams)
N40-10B	10	16.3
N40-15B	15	18.5
N40-20B	20	20.7
N40-25B	25	22.9

Dimensions : mm

DATA

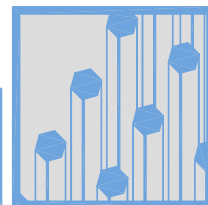
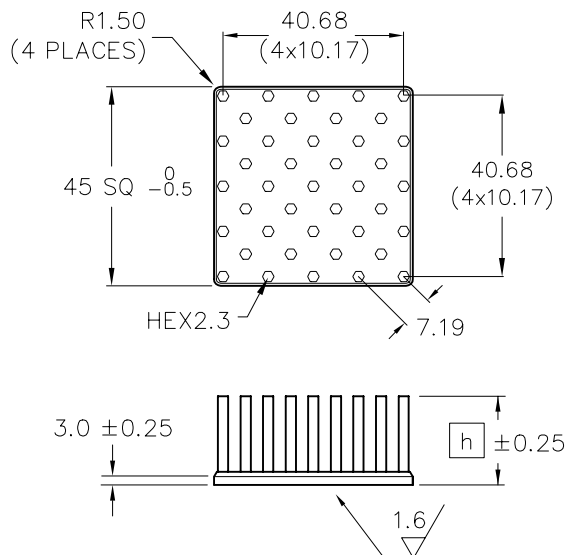


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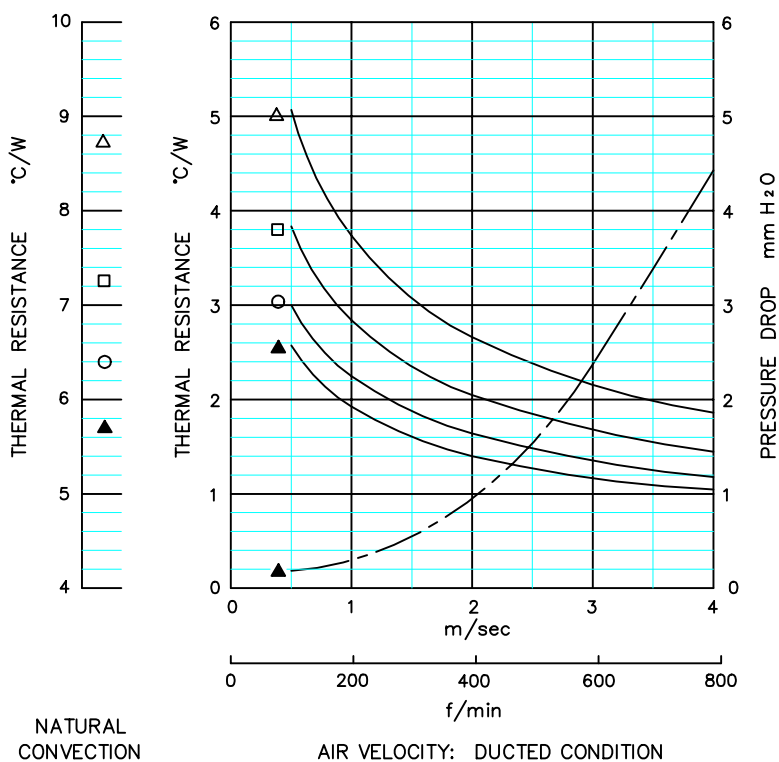
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ALPHA**Natural Convection Heat Sink****N45****DIM**

HEAT SINK
 MATERIAL : A 6063
 FINISH : BLACK ANODIZE

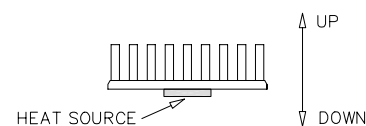
MODEL	HEIGHT [h]	WEIGHT (grams)
N45-10B	10	20.2
N45-15B	15	22.6
N45-20B	20	25.0
N45-25B	25	27.4

Dimensions : mm

DATA

- △ N45-10B
- N45-15B
- N45-20B
- ▲ N45-25B

- 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

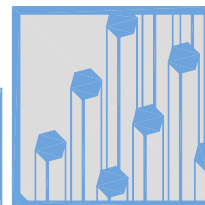
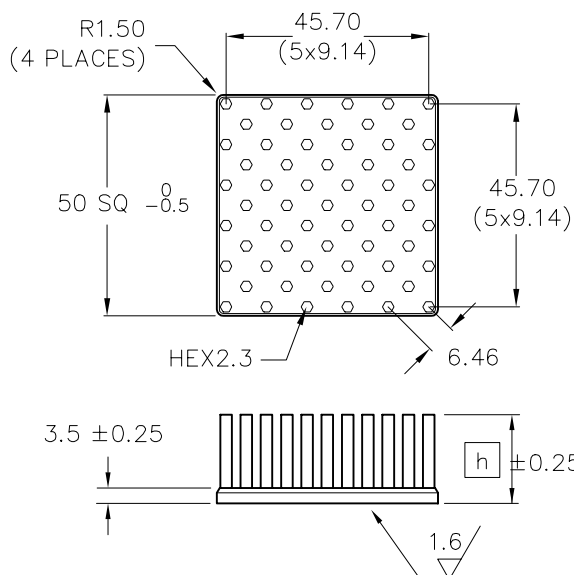
- BASED ON ALPHA'S STANDARD TEST PROCEDURE.
 REFER TO TECHNICAL INFORMATION.

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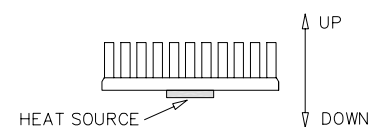
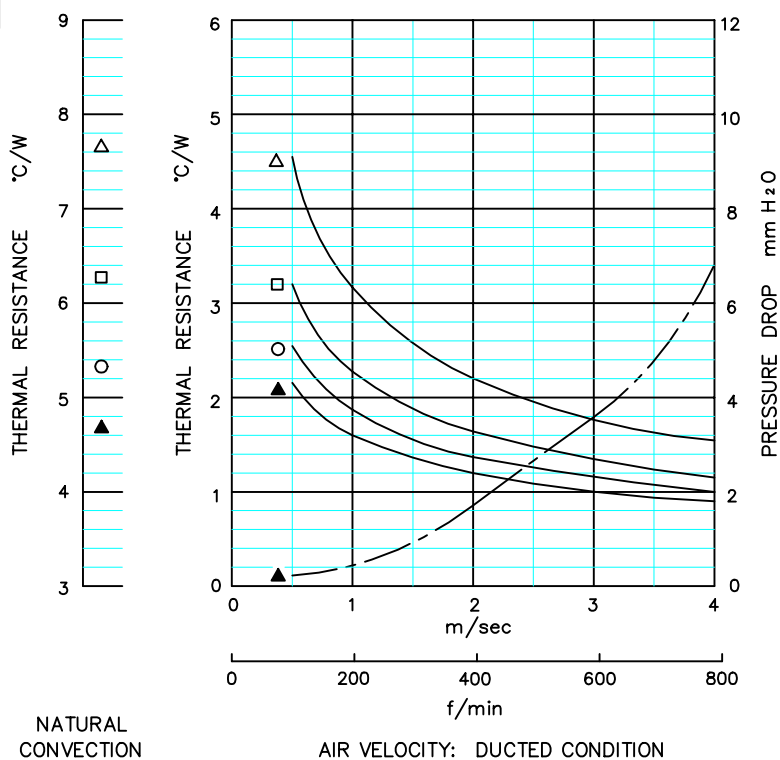
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ALPHA**Natural Convection Heat Sink****N50****DIM**

HEAT SINK
 MATERIAL : A 6063
 FINISH : BLACK ANODIZE

MODEL	HEIGHT h	WEIGHT (grams)
N50-10B	10	28.9
N50-15B	15	32.4
N50-20B	20	35.8
N50-25B	25	39.4

Dimensions : mm

DATA

NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

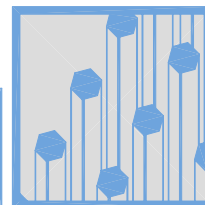
■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
 REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

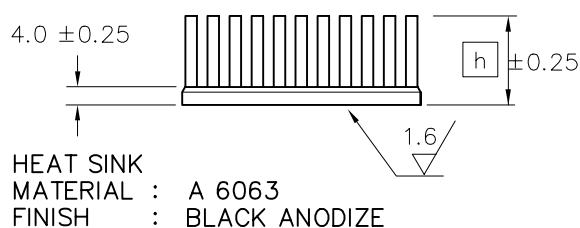
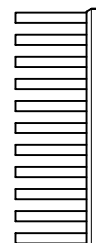
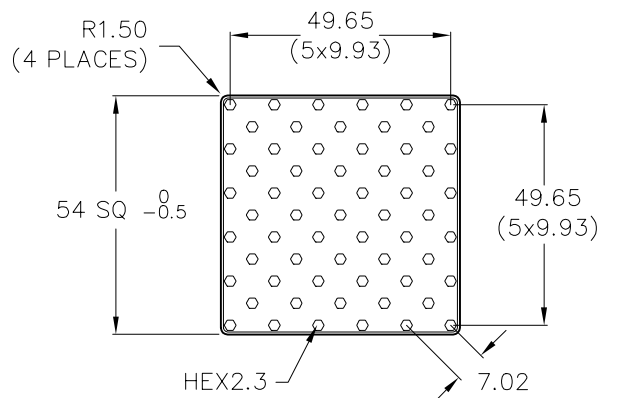
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ALPHA**Natural Convection Heat Sink****N54**

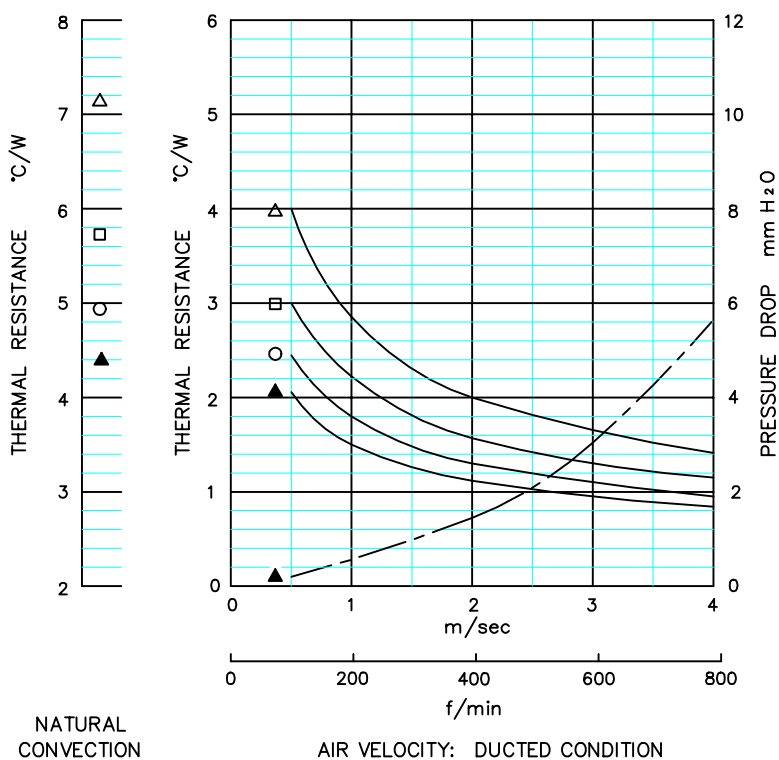
DIM



MODEL	HEIGHT [h]	WEIGHT (grams)
N54-10B	10	36.4
N54-15B	15	39.9
N54-20B	20	43.5
N54-25B	25	46.8

Dimensions : mm

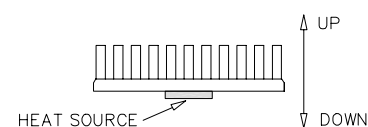
DATA



- △ N54-10B
- N54-15B
- N54-20B
- ▲ N54-25B

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

● NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 10.5(W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

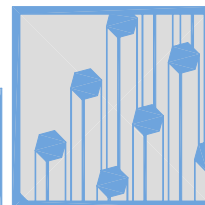
■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

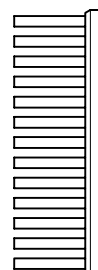
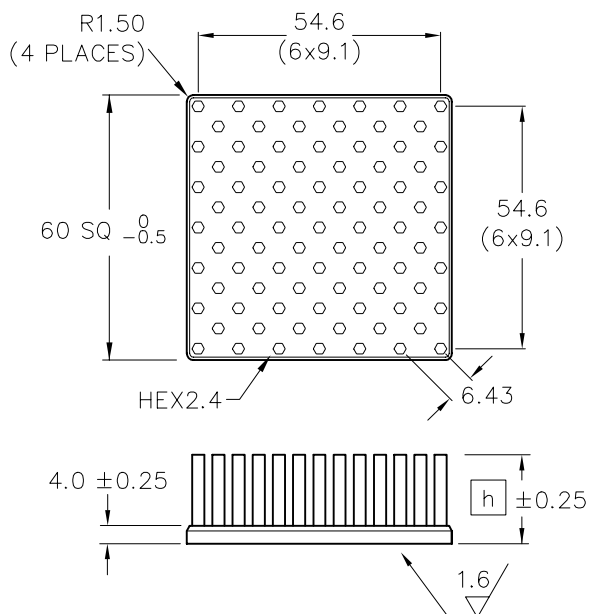
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ALPHA**Natural Convection Heat Sink****N60**

DIM

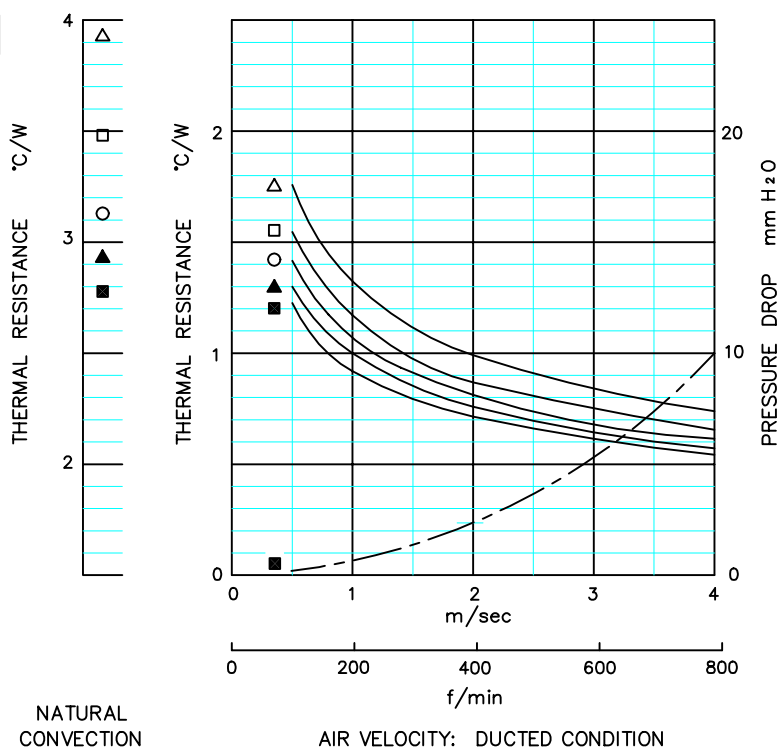


HEAT SINK
MATERIAL : A 6063
FINISH : BLACK ANODIZE

MODEL	HEIGHT [h]	WEIGHT (grams)
N60-20B	20	57.0
N60-25B	25	62.5
N60-30B	30	68.0
N60-35B	35	73.5
N60-40B	40	79.0

Dimensions : mm

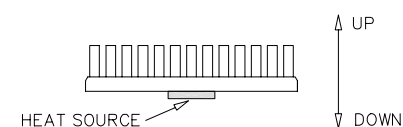
DATA



- △ N60-20B
- N60-25B
- N60-30B
- ▲ N60-35B
- N60-40B

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

○ NATURAL CONVECTION
DUMMY HEATER SIZE: 12.7 SQ
DISSIPATED POWER: 13.0(W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

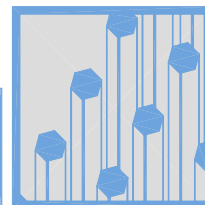
■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

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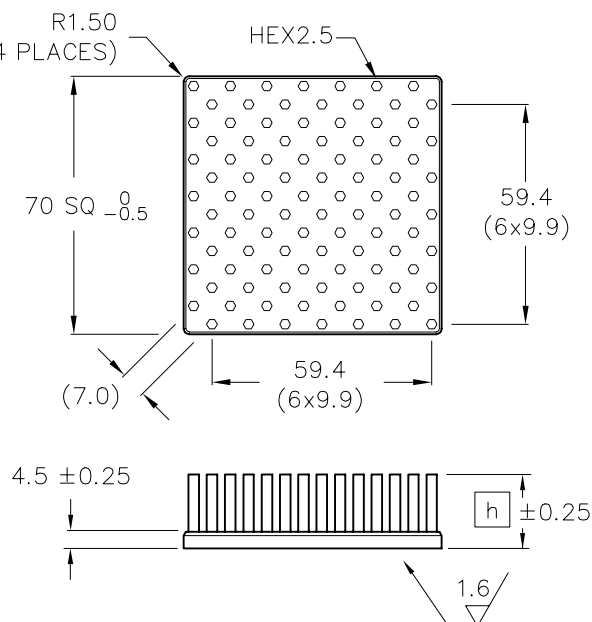
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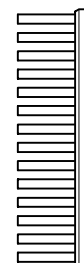
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ALPHA**Natural Convection Heat Sink****N70**

DIM



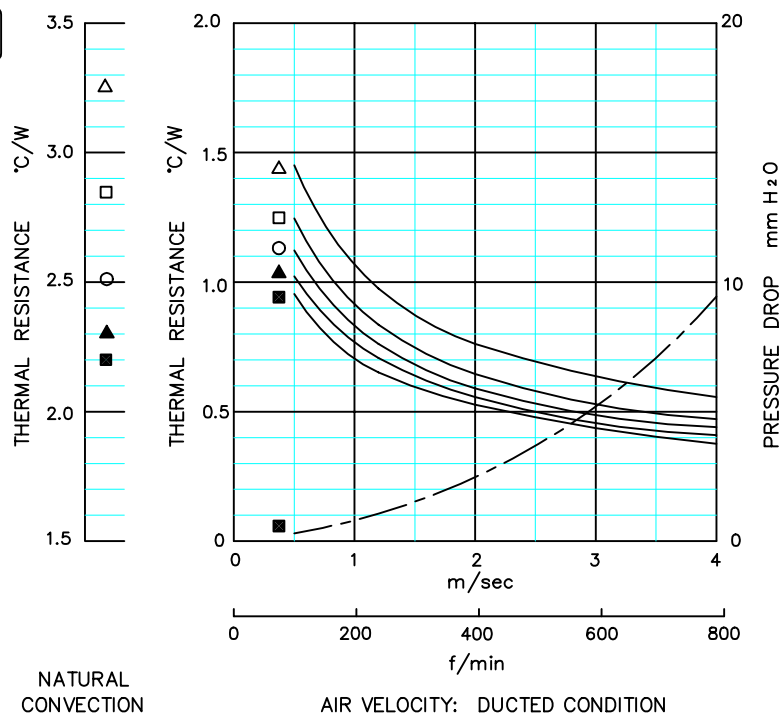
HEAT SINK
MATERIAL : A 6063
FINISH : BLACK ANODIZE



MODEL	HEIGHT h	WEIGHT (grams)
N70-20B	20	81.8
N70-25B	25	88.8
N70-30B	30	95.8
N70-35B	35	102.8
N70-40B	40	109.8

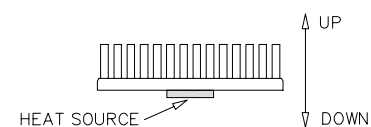
Dimensions : mm

DATA



- △ N70-20B
- N70-25B
- N70-30B
- ▲ N70-35B
- N70-40B

- DUCTED CONDITION
DUMMY HEATER SIZE: 25.4 SQ
THERMAL RESISTANCE _____
PRESSURE DROP _____
- NATURAL CONVECTION
DUMMY HEATER SIZE: 25.4 SQ
DISSIPATED POWER: 16.0(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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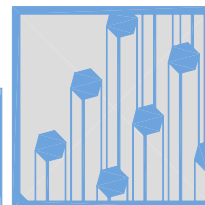
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FAX +1(408)567-8053
E mail : sales@alphanovatech.com
URL : <http://www.alphanovatech.com>

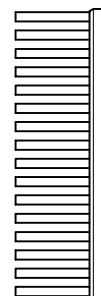
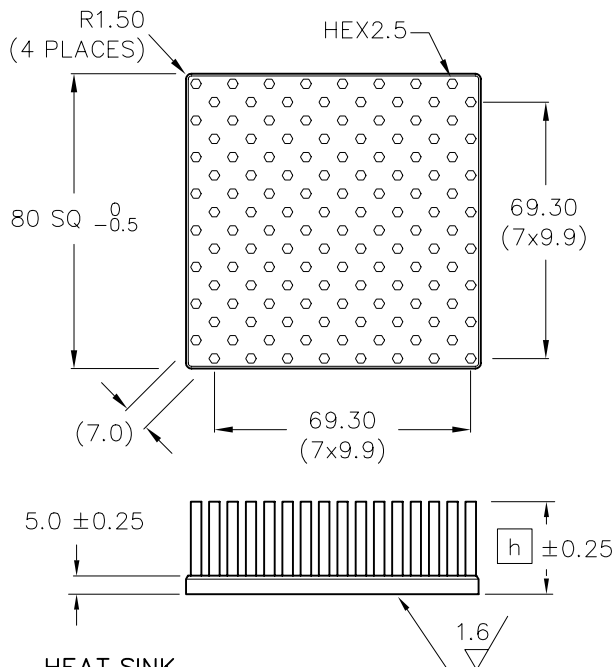
ALPHA

Natural Convection Heat Sink

N80



DIM

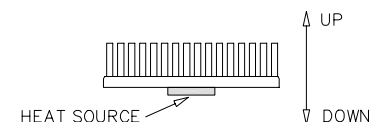
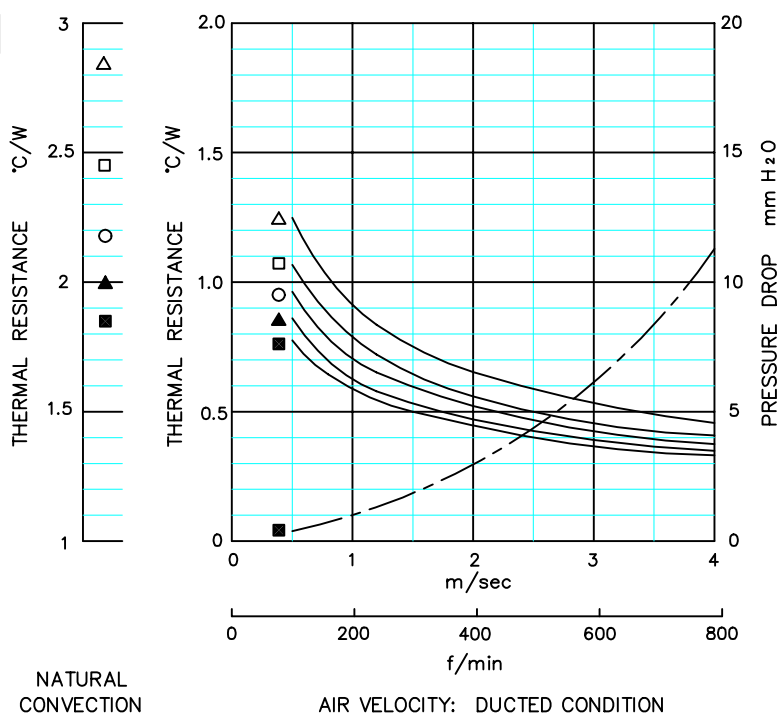


HEAT SINK
MATERIAL : A 6063
FINISH : BLACK ANODIZE

MODEL	HEIGHT [h]	WEIGHT (grams)
N80-20B	20	114.5
N80-25B	25	123.75
N80-30B	30	133.0
N80-35B	35	142.25
N80-40B	40	151.5

Dimensions : mm

DATA



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

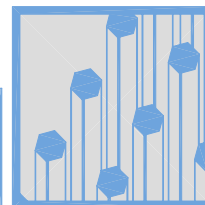
■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

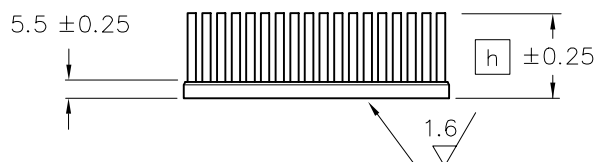
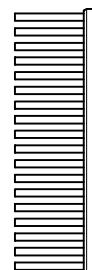
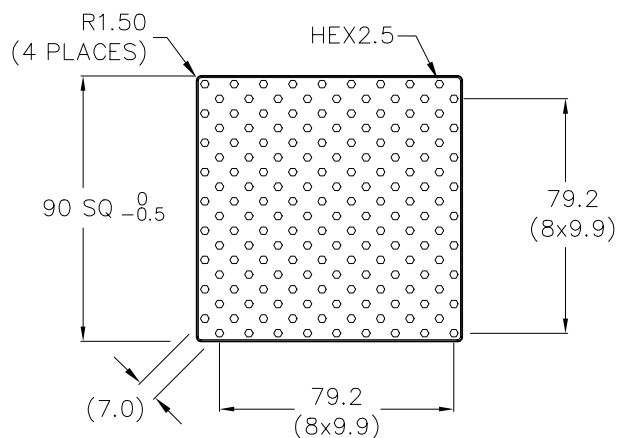
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ALPHA**Natural Convection Heat Sink****N90**

DIM

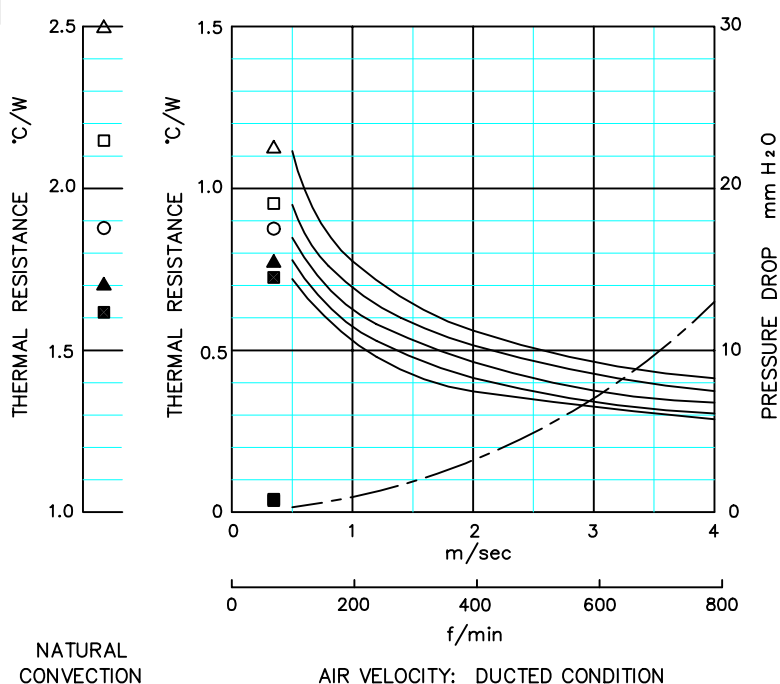


HEAT SINK
MATERIAL : A 6063
FINISH : BLACK ANODIZE

MODEL	HEIGHT [h]	WEIGHT (grams)
N90-20B	20	153.60
N90-25B	25	165.65
N90-30B	30	177.70
N90-35B	35	189.75
N90-40B	40	201.80

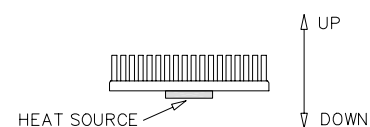
Dimensions : mm

DATA



- △ N90-20B
- N90-25B
- N90-30B
- ▲ N90-35B
- N90-40B

- DUCTED CONDITION
DUMMY HEATER SIZE: 25.4 SQ
THERMAL RESISTANCE ———
PRESSURE DROP - - - - -
- NATURAL CONVECTION
DUMMY HEATER SIZE: 25.4 SQ
DISSIPATED POWER: 21.0(W)



NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

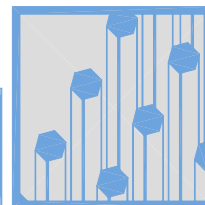
- BASED ON ALPHA'S STANDARD TEST
PROCEDURE.
REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

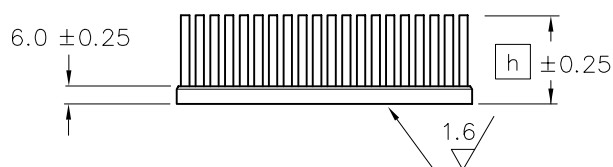
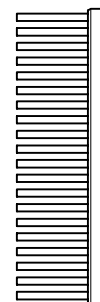
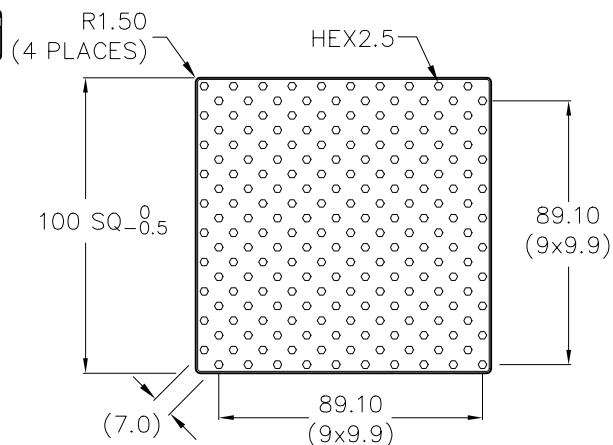
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DIM

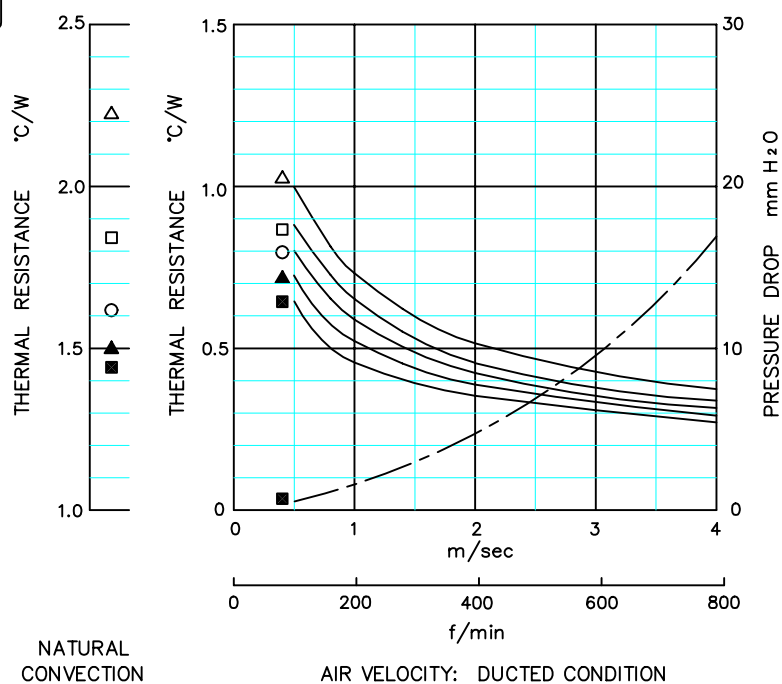


HEAT SINK
MATERIAL : A 6063
FINISH : BLACK ANODIZE

MODEL	HEIGHT h	WEIGHT (grams)
N100-20B	20	201.4
N100-25B	25	215.4
N100-30B	30	229.4
N100-35B	35	243.4
N100-40B	40	257.4

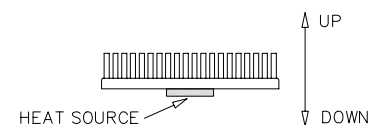
Dimensions : mm

DATA



- | | |
|---|----------|
| △ | N100-20B |
| □ | N100-25B |
| ○ | N100-30B |
| ▲ | N100-35B |
| ■ | N100-40B |

- DUCTED CONDITION
DUMMY HEATER SIZE: 25.4 SQ
THERMAL RESISTANCE _____
PRESURE DROP _____
- NATURAL CONVECTION
DUMMY HEATER SIZE: 25.4 SQ
DISSIPATED POWER: 24.0(W)

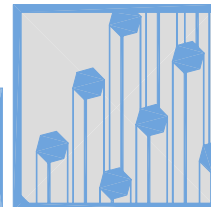


NOTE ORIENTATION OF HEAT SINK USED
FOR NATURAL CONVECTION TESTING

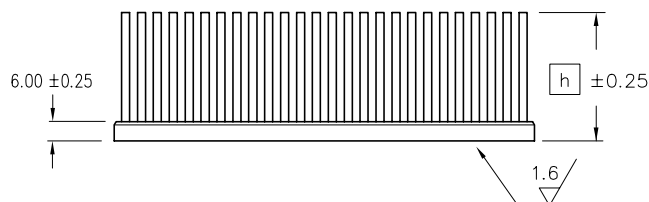
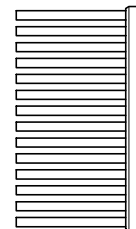
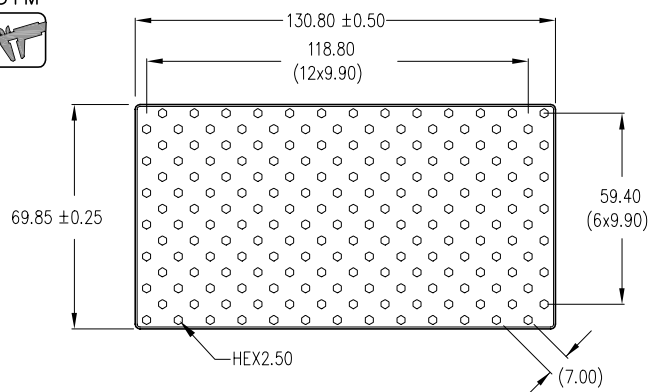
- BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

ALPHA

Natural Convection Heat Sink

N13070

DIM



HEAT SINK

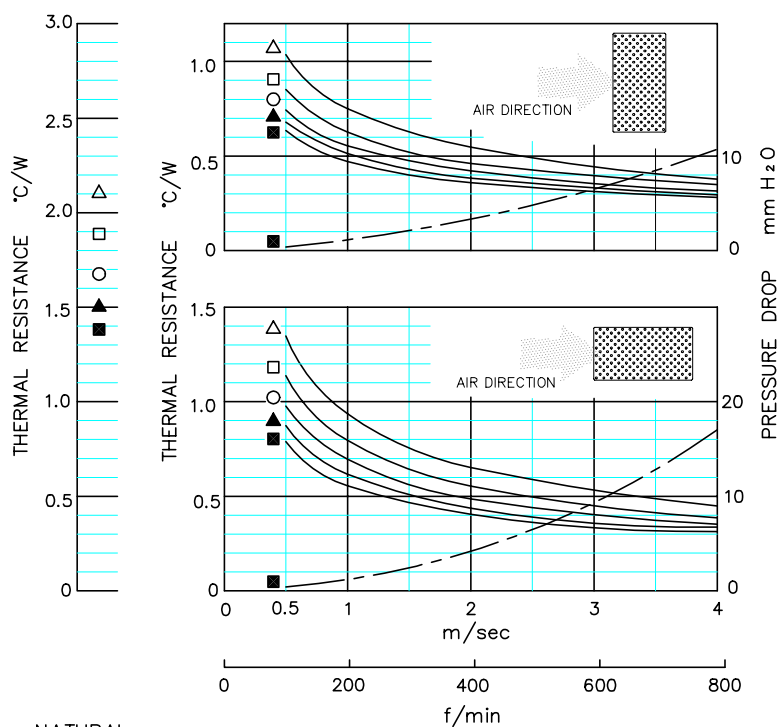
MATERIAL : A 6063

FINISH : BLACK ANODIZE

MODEL	HEIGHT [h]	WEIGHT (grams)
N13070 - 20B	20.0	183.6
N13070 - 25B	25.0	196.5
N13070 - 30B	30.0	209.4
N13070 - 35B	35.0	222.3
N13070 - 40B	40.0	235.2

Dimensions : mm

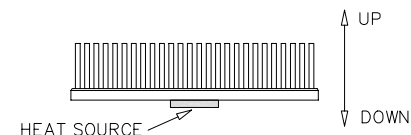
DATA



- △ N13070-20B
- N13070-25B
- N13070-30B
- ▲ N13070-35B
- N13070-40B

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

● NATURAL CONVECTION
 DUMMY HEATER SIZE: 25.4 SQ
 DISSIPATED POWER: 31.5(W)



NOTE ORIENTATION OF HEAT SINK USED FOR NATURAL CONVECTION TESTING

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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