

# UBR Series UBL Series

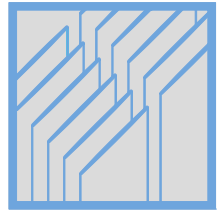
Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

**ALPHA**

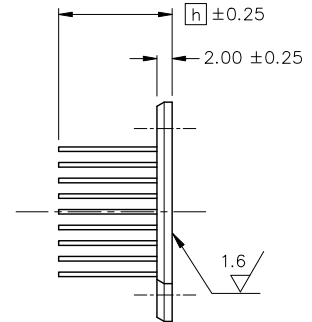
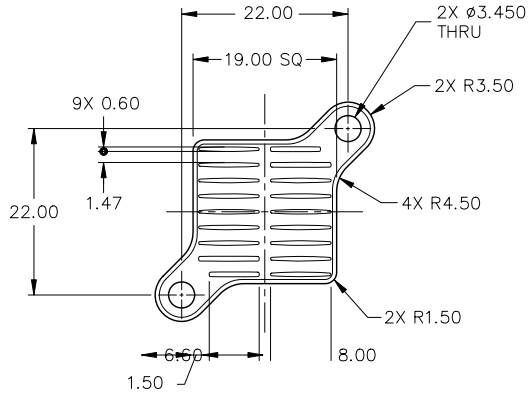
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

# UBR19



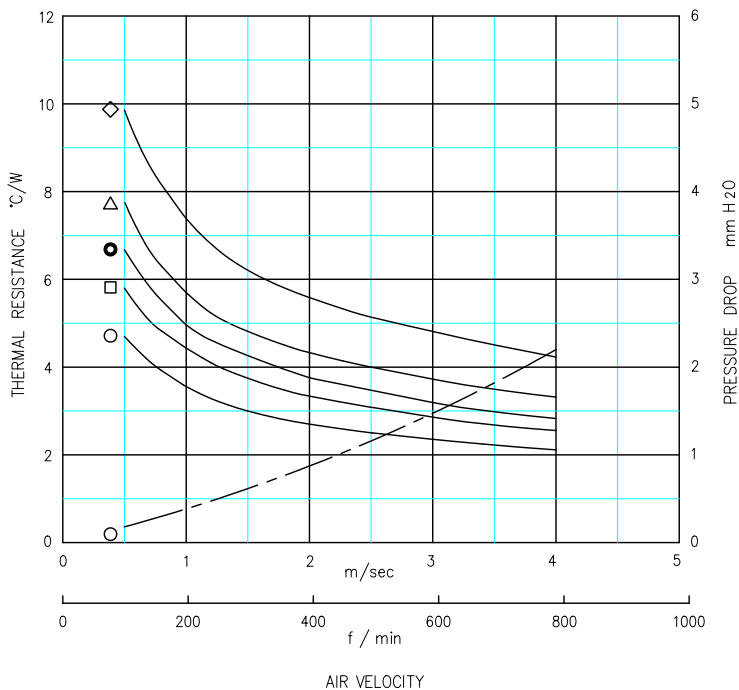
DIM



MODEL	HEATSINK HEIGHT $h$	WEIGHT (grams)
UBR19-8B	8	3.4
UBR19-10B	10	3.8
UBR19-12B	12	4.2
UBR19-15B	15	4.7
UBR19-20B	20	5.6

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



- ◇ UBR19-8B
- △ UBR19-10B
- UBR19-12B
- UBR19-15B
- UBR19-20B

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

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

Alpha Company Ltd.

256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN  
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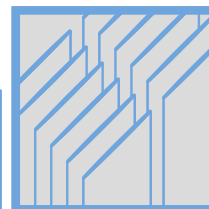
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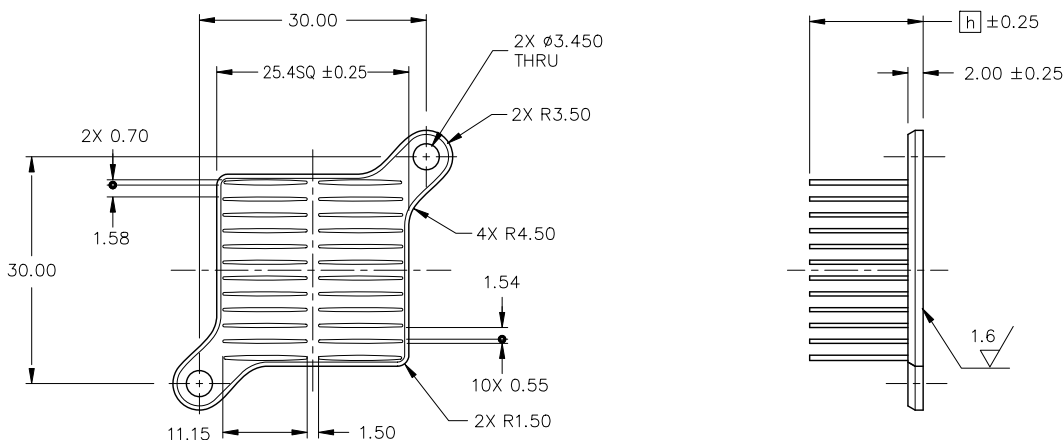
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

# UBR25



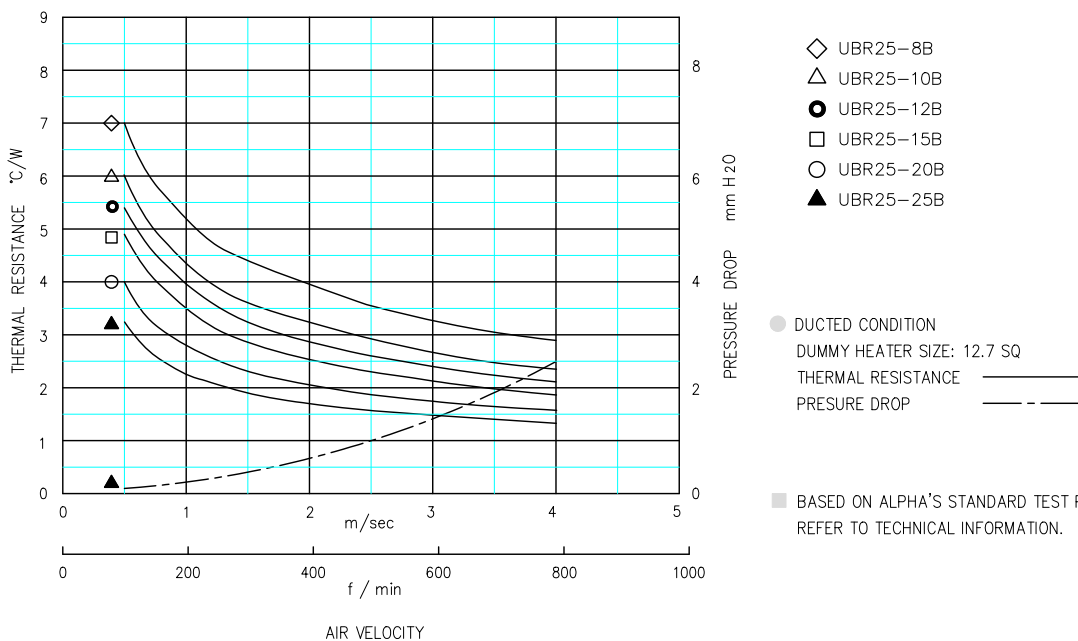
DIM



MODEL	HEATSINK HEIGHT $h$	WEIGHT (grams)
UBR25-8B	8	6.0
UBR25-10B	10	6.7
UBR25-12B	12	7.4
UBR25-15B	15	8.5
UBR25-20B	20	10.2
UBR25-25B	25	11.9

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



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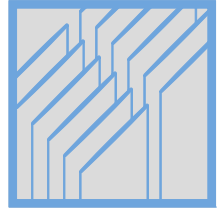
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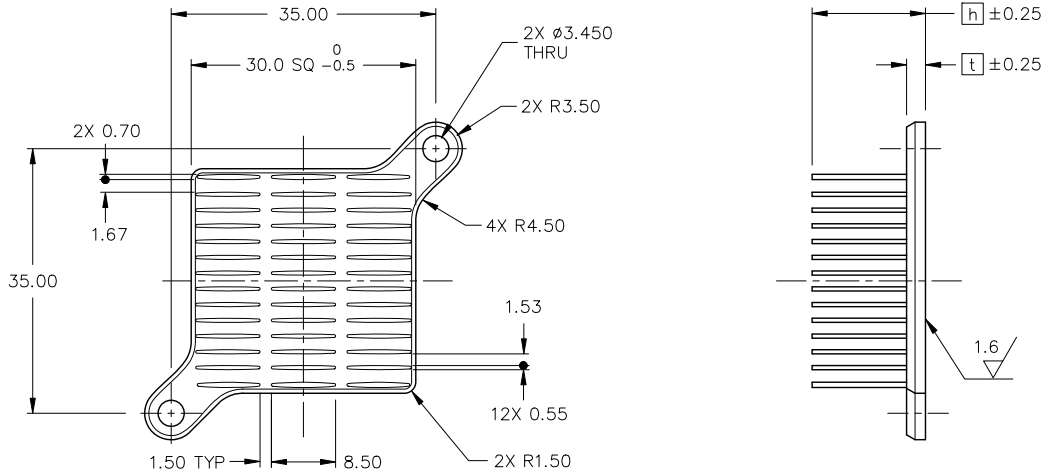
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
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# UBR30



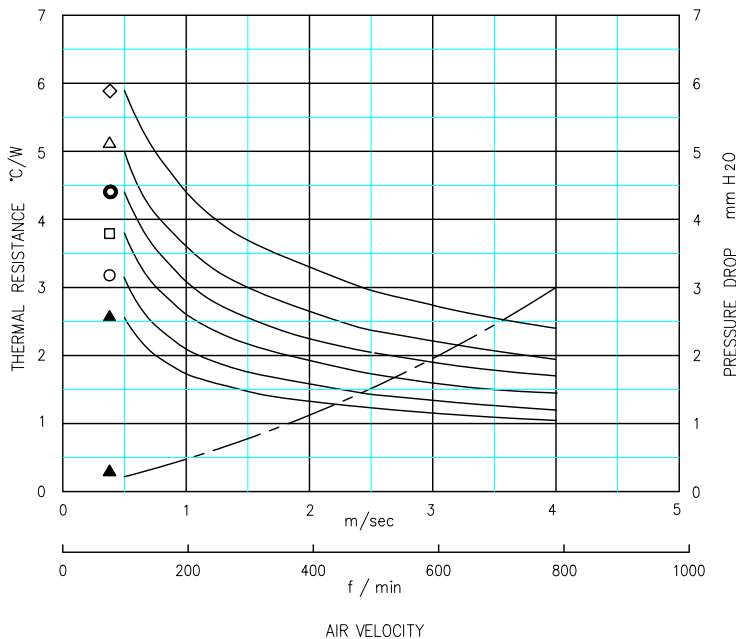
DIM



MODEL	HEIGHT [h]	THICKNESS [h]	WEIGHT (grams)
UBR30-8B	8	2.50	8.0
UBR30-10B	10		10.0
UBR30-12B	12		11.0
UBR30-15B	15		12.3
UBR30-20B	20		14.6
UBR30-25B	25		16.9
UBR30-[h]B	[h] < 10	2.00	-
	10 ≤ [h]	2.50	-

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



- ◇ UBR30-8B
- △ UBR30-10B
- UBR30-12B
- UBR30-15B
- UBR30-20B
- ▲ UBR30-25B

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

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

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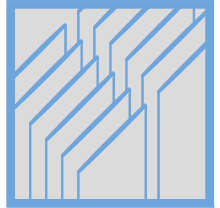
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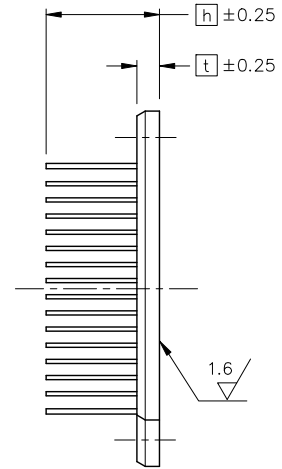
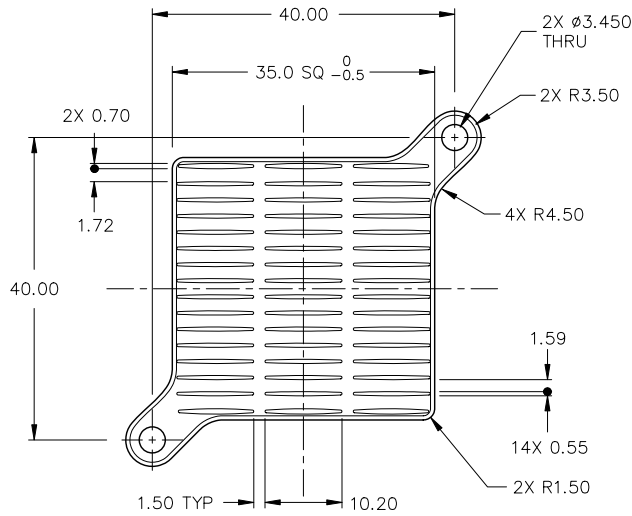
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

# UBR35



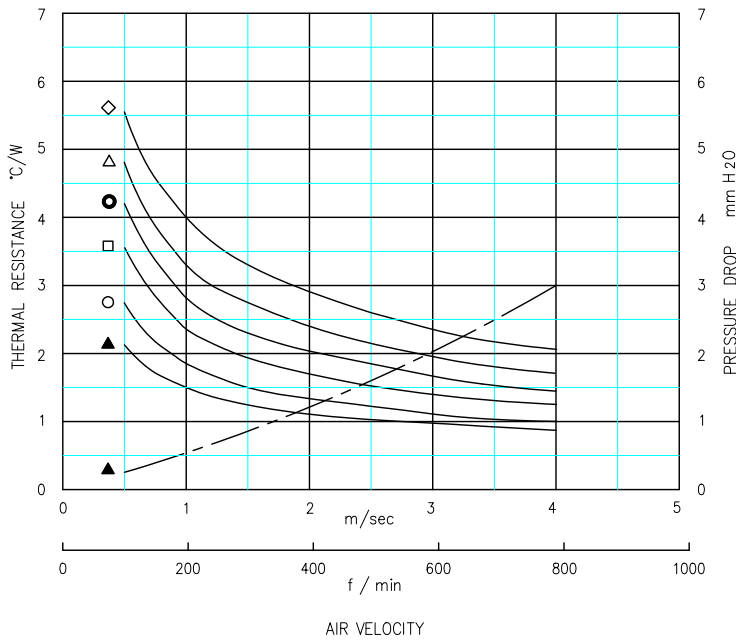
DIM



MODEL	HEIGHT [h]	THICKNESS [h]	WEIGHT (grams)
UBR35-8B	8	3.00	10.8
UBR35-10B	10		14.9
UBR35-12B	12		16.2
UBR35-15B	15		18.1
UBR35-20B	20		21.2
UBR35-25B	25		24.4
UBR35-[h]B	[h] < 10	2.00	-
	10 ≤ [h]	3.00	-

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



- ◇ UBR35-8B
- △ UBR35-10B
- UBR35-12B
- UBR35-15B
- UBR35-20B
- ▲ UBR35-25B

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

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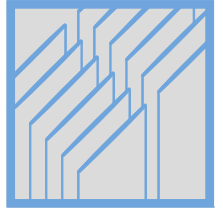
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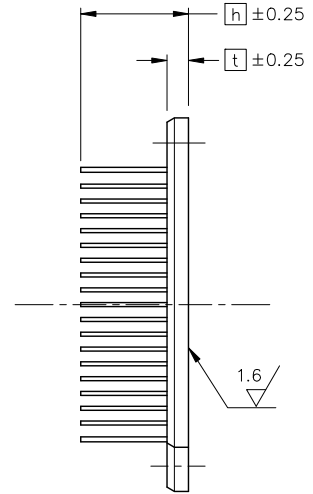
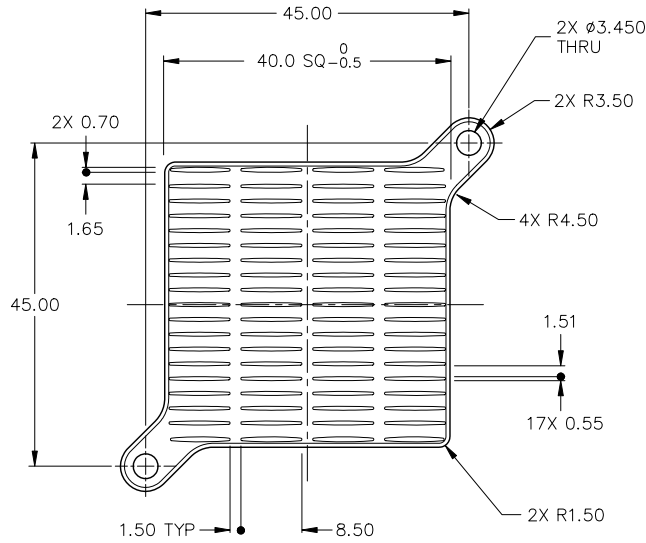
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

# UBR40



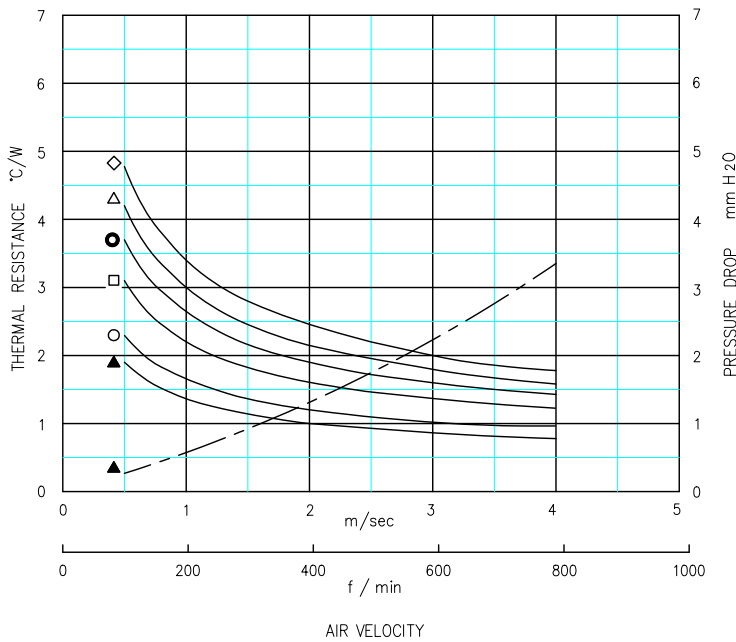
DIM



MODEL	HEIGHT [h]	THICKNESS [h]	WEIGHT (grams)
UBR40-8B	8	2.50	15.8
UBR40-10B	10		19.3
UBR40-12B	12		21.7
UBR40-15B	15		23.5
UBR40-20B	20		27.6
UBR40-25B	25		31.8
UBR40-[h]B	[h] < 10	2.50	-
	10 ≤ [h]	3.00	-

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



- ◇ UBR40-8B
- △ UBR40-10B
- UBR40-12B
- UBR40-15B
- UBR40-20B
- ▲ UBR40-25B

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

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.  
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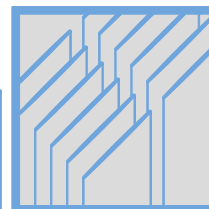
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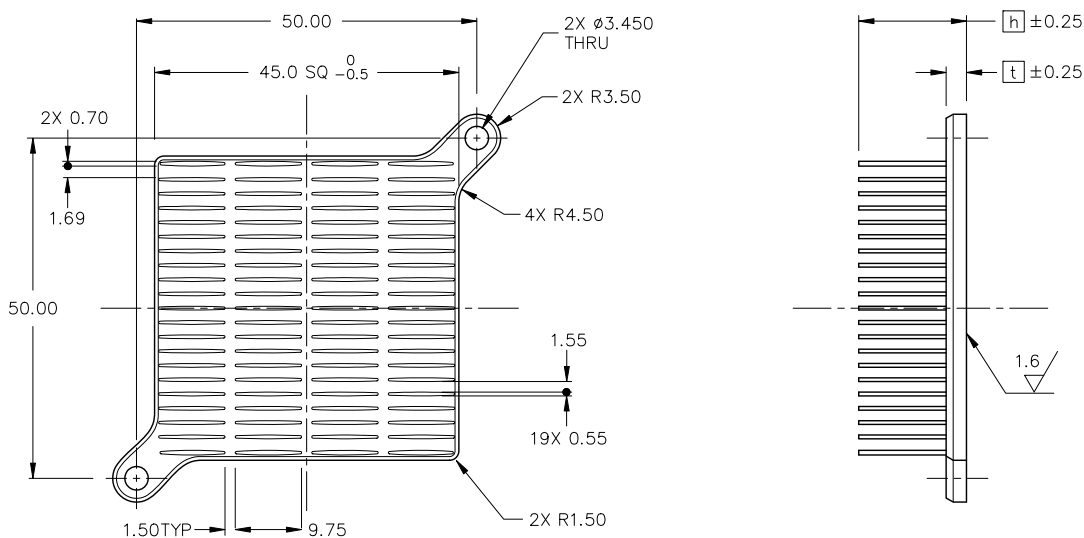
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

# UBR 45



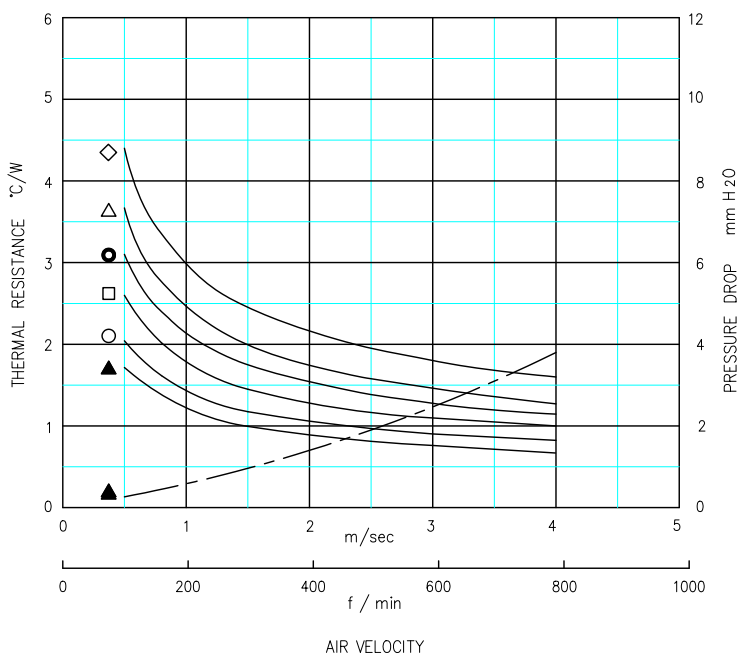
DIM



MODEL	HEIGHT [h]	THICKNESS [h]	WEIGHT (grams)
UBR45-8B	8	3.00	19.9
UBR45-10B	10		24.3
UBR45-12B	12		27.6
UBR45-15B	15		29.6
UBR45-20B	20		34.8
UBR45-25B	25		40.1
UBR45-[h]B	[h] < 10	2.50	-
	10 ≤ [h]	3.00	-

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



- ◇ UBR45-8B
- △ UBR45-10B
- UBR45-12B
- UBR45-15B
- UBR45-20B
- ▲ UBR45-25B

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

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

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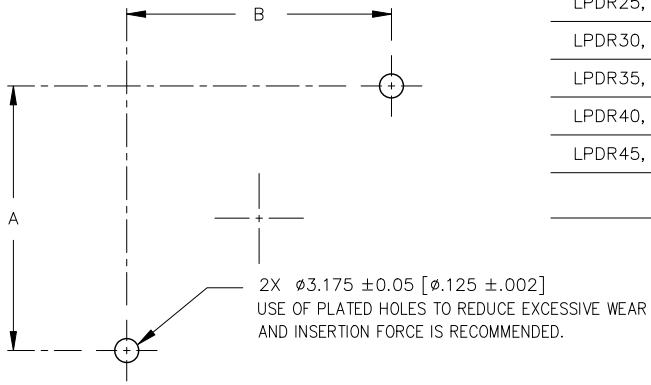
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REF



PCB HOLE LAYOUT



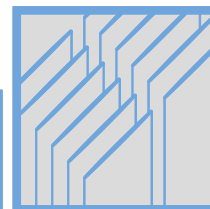
LPDR19 AND UBR19	22.0	22.0
LPDR25, UBR25, NR25 AND SR25	30.0	30.0
LPDR30, UBR30, NR30 AND SR30	35.0	35.0
LPDR35, UBR35, NR35 AND SR35	40.0	40.0
LPDR40, UBR40, NR40 AND SR40	45.0	45.0
LPDR45, UBR45 AND NR45	50.0	50.0
MODEL	A	B



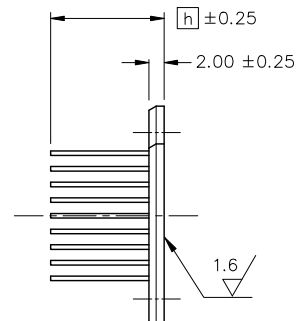
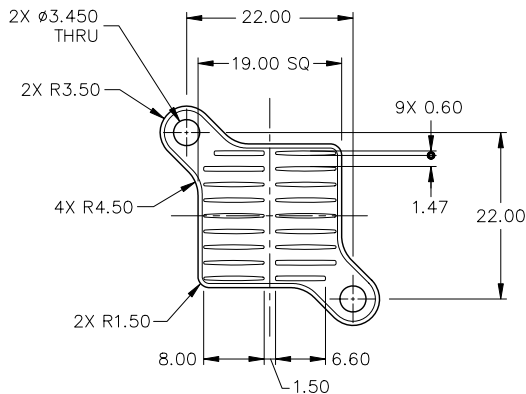
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

# UBL19



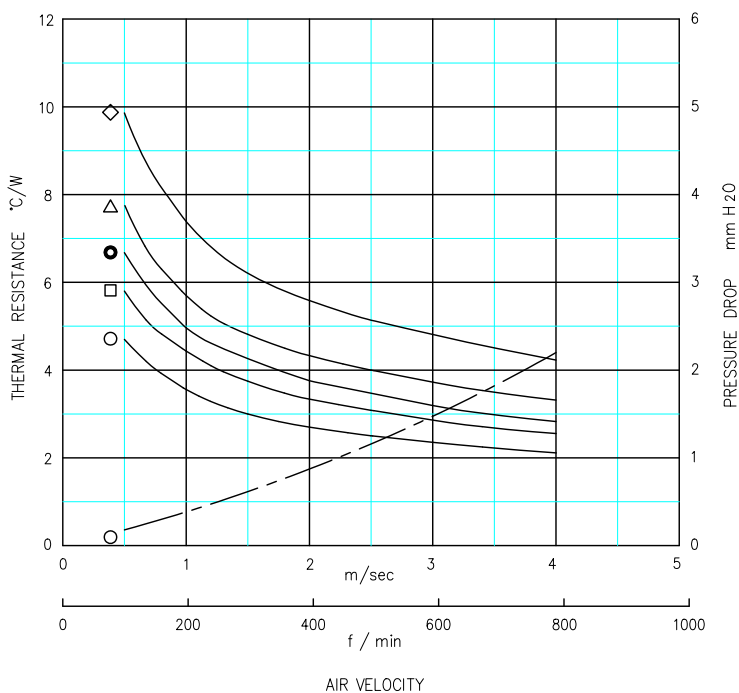
DIM



MODEL	HEATSINK HEIGHT $h$	WEIGHT (grams)
UBL19-8B	8	3.4
UBL19-10B	10	3.8
UBL19-12B	12	4.2
UBL19-15B	15	4.7
UBL19-20B	20	5.6

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



- ◇ UBL19-8B
- △ UBL19-10B
- UBL19-12B
- UBL19-15B
- UBL19-20B

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

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.  
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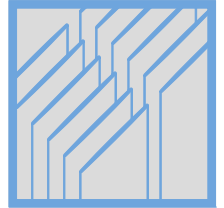
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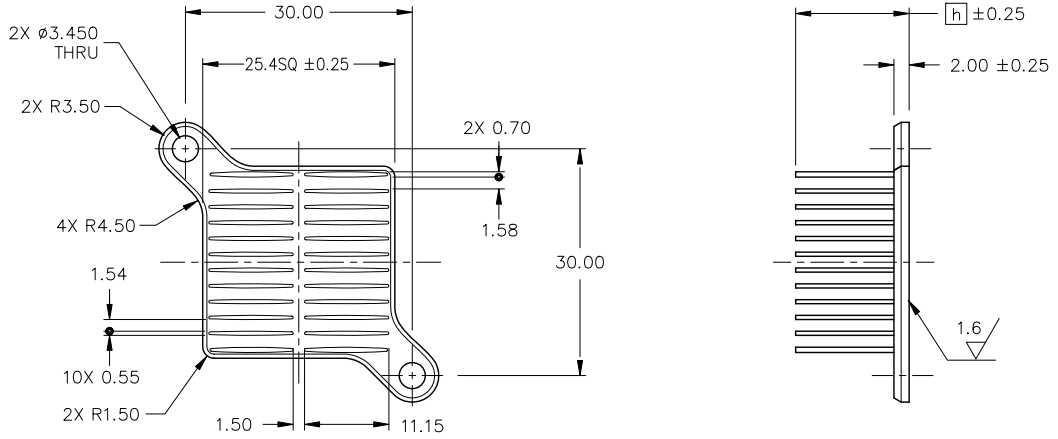
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

# UBL25



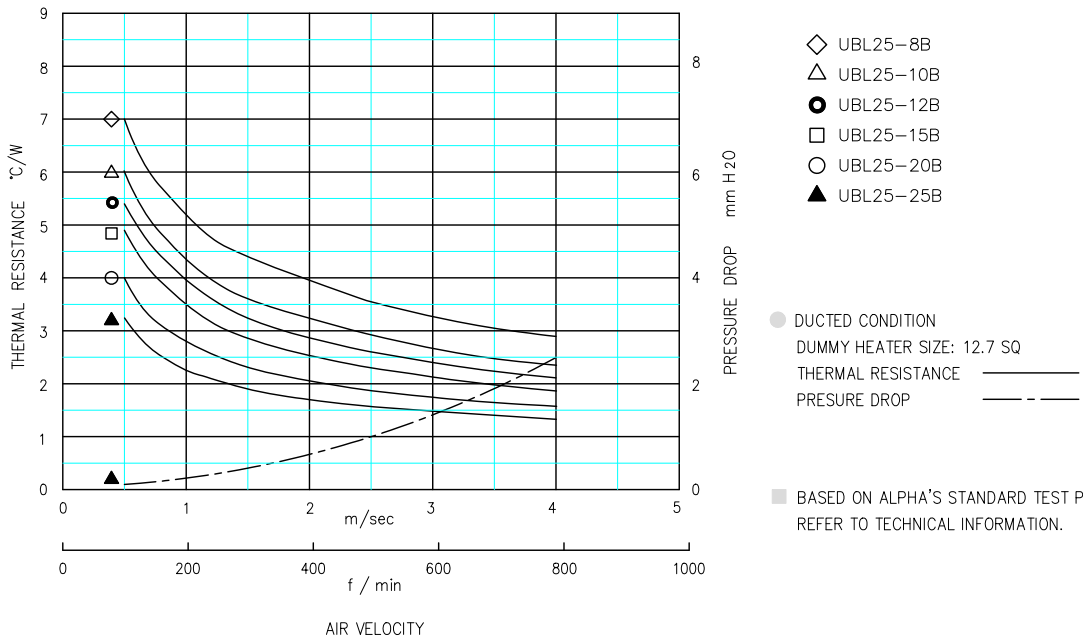
DIM



MODEL	HEATSINK HEIGHT $h$	WEIGHT (grams)
UBL25-8B	8	6.0
UBL25-10B	10	6.7
UBL25-12B	12	7.4
UBL25-15B	15	8.5
UBL25-20B	20	10.2
UBL25-25B	25	11.9

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



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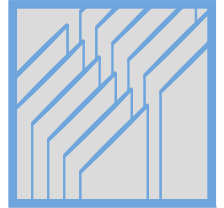
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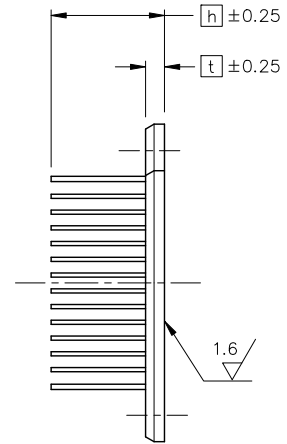
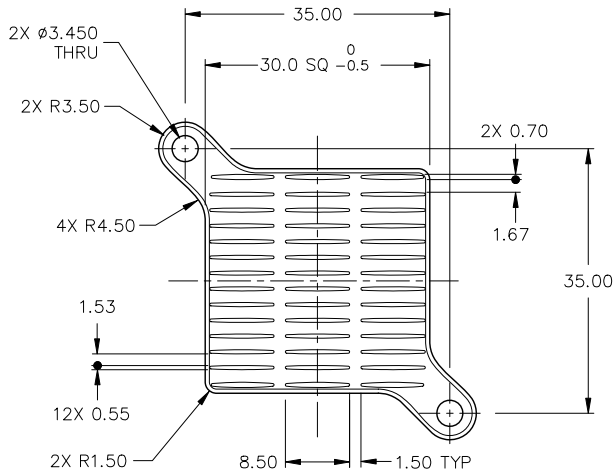
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
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# UBL30



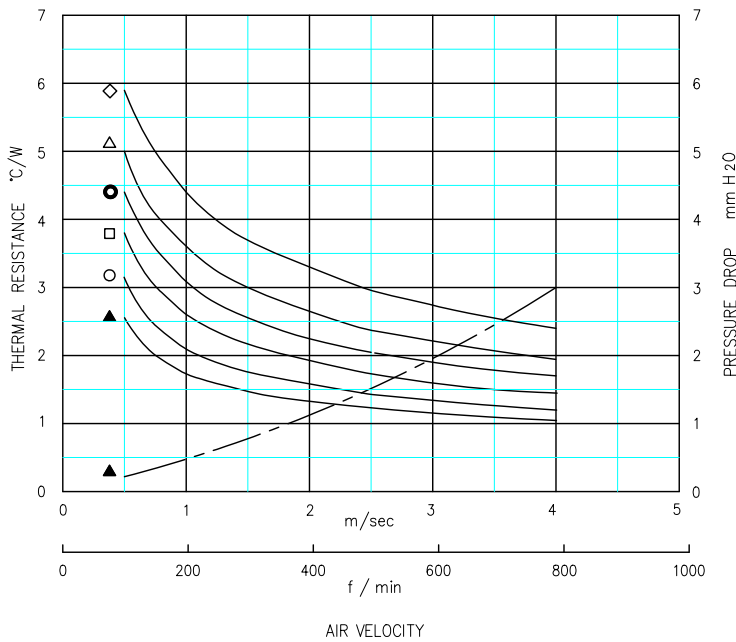
DIM



MODEL	HEIGHT [h]	THICKNESS [h]	WEIGHT (grams)
UBL30-8B	8	2.50	8.0
UBL30-10B	10		10.0
UBL30-12B	12		11.0
UBL30-15B	15		12.3
UBL30-20B	20		14.6
UBL30-25B	25		16.9
UBL30-[h]B	[h] < 10	2.00	-
	10 ≤ [h]	2.50	-

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



- ◇ UBL30-8B
- △ UBL30-10B
- UBL30-12B
- UBL30-15B
- UBL30-20B
- ▲ UBL30-25B

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

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

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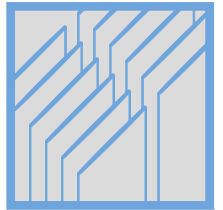
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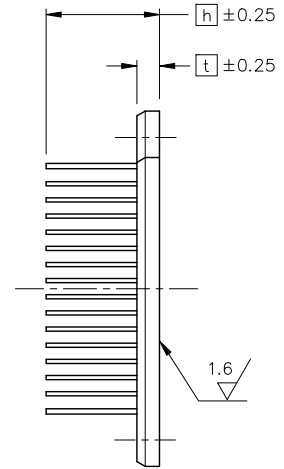
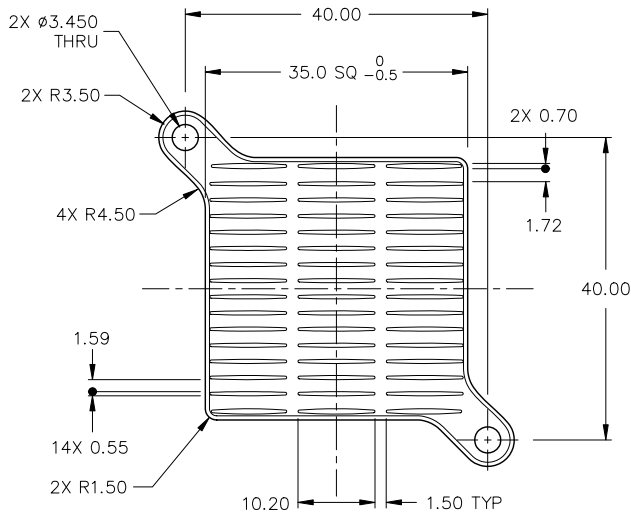
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

# UBL35



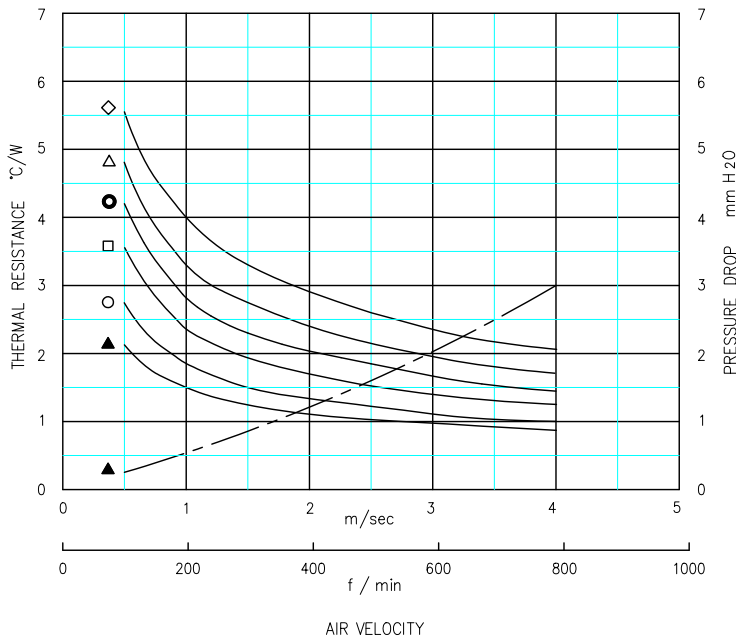
DIM



MODEL	HEIGHT [h]	THICKNESS [h]	WEIGHT (grams)
UBL35-8B	8	3.00	10.8
UBL35-10B	10		14.9
UBL35-12B	12		16.2
UBL35-15B	15		18.1
UBL35-20B	20		21.2
UBL35-25B	25		24.4
UBL35-[h]B	[h] < 10	2.00	-
	10 ≤ [h]	3.00	-

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



- ◇ UBL35-8B
- △ UBL35-10B
- UBL35-12B
- UBL35-15B
- UBL35-20B
- ▲ UBL35-25B

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

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

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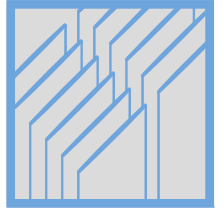
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

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PHONE +1(408)567-8082  
FAX +1(408)567-8053  
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URL : http://www.alphanovatech.com

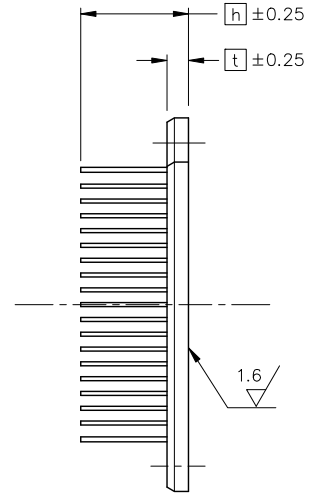
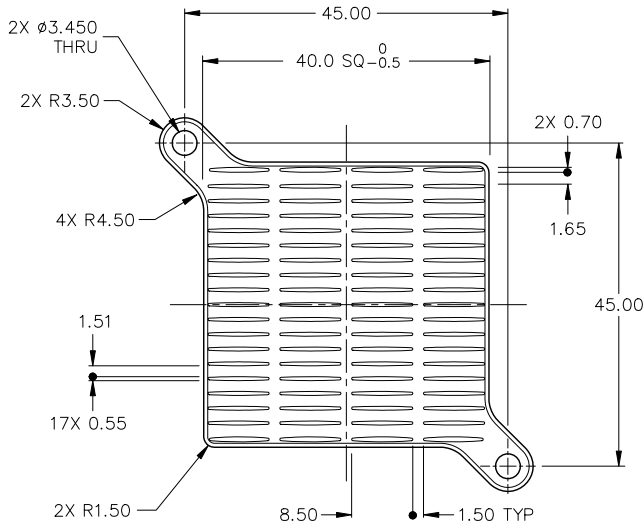
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

# UBL40



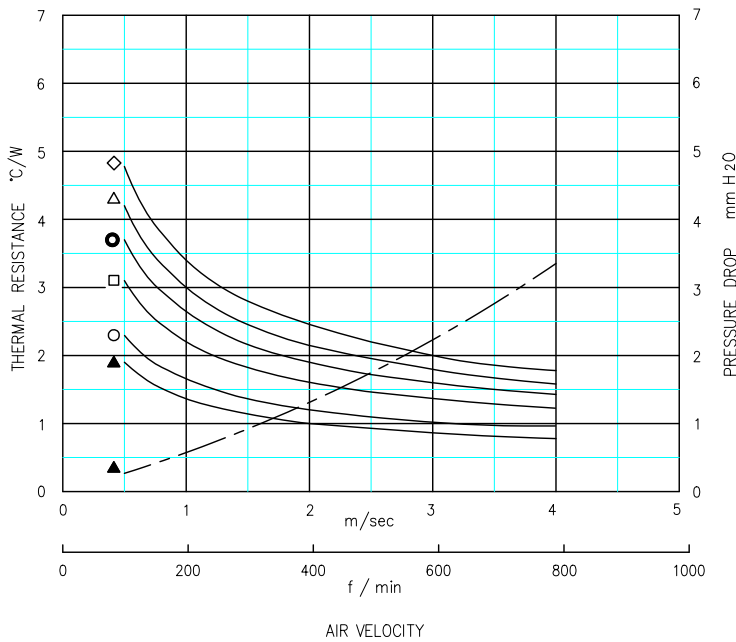
DIM



MODEL	HEIGHT [h]	THICKNESS [h]	WEIGHT (grams)
UBL40-8B	8	2.50	15.8
UBL40-10B	10	3.00	19.3
UBL40-12B	12		21.7
UBL40-15B	15		23.5
UBL40-20B	20		27.6
UBL40-25B	25		31.8
UBL40-[h]B	[h] < 10	2.50	-
	10 ≤ [h]	3.00	-

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



- ◇ UBL40-8B
- △ UBL40-10B
- UBL40-12B
- UBL40-15B
- UBL40-20B
- ▲ UBL40-25B

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

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

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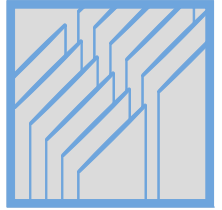
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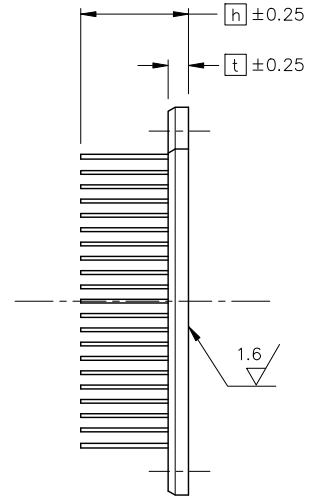
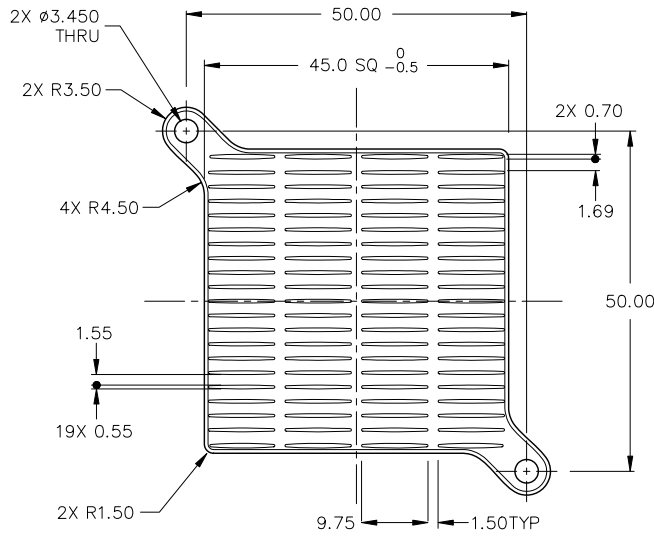
# ALPHA

Low Pressure Drop and  
Low Thermal Resistance Heat Sink  
with Mounting Tabs

# UBL 45



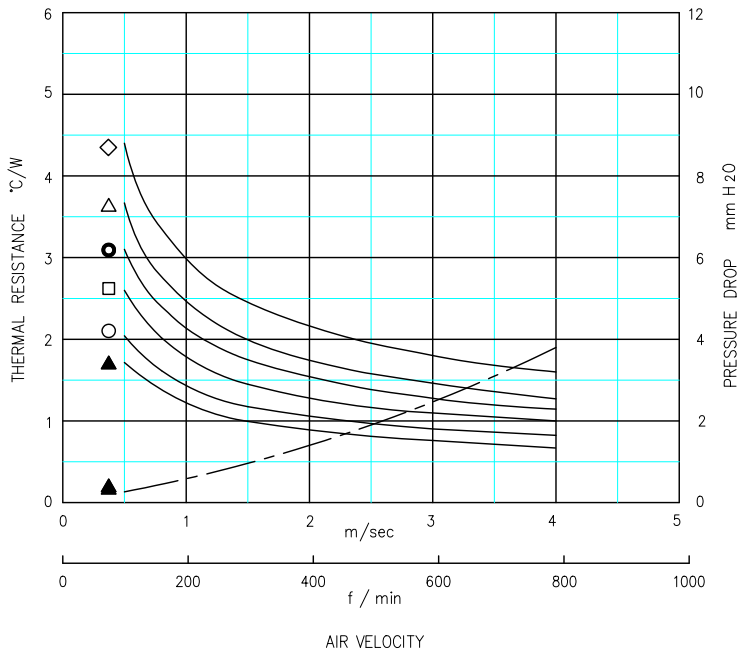
DIM



MODEL	HEIGHT [h]	THICKNESS [h]	WEIGHT (grams)
UBL45-8B	8	2.50	19.9
UBL45-10B	10	3.00	24.3
UBL45-12B	12		27.6
UBL45-15B	15		29.6
UBL45-20B	20		34.8
UBL45-25B	25		40.1
UBL45-[h]B	[h] < 10	2.50	-
	10 ≤ [h]	3.00	-

MATERIAL : A6063  
FINISH : BLACK ANODIZE  
DIMENSIONS : mm

DATA



- ◇ UBL45-8B
- △ UBL45-10B
- UBL45-12B
- UBL45-15B
- UBL45-20B
- ▲ UBL45-25B

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

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

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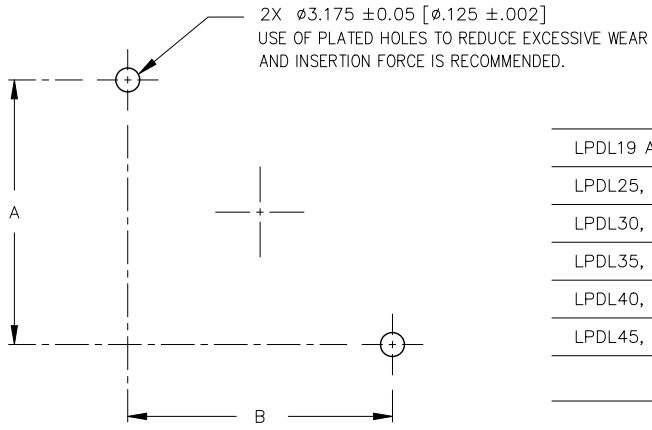
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REF



PCB HOLE LAYOUT



LPDL19 AND UBL19	22.0	22.0
LPDL25, UBL25 AND NR25	30.0	30.0
LPDL30, UBL30 AND NR30	35.0	35.0
LPDL35, UBL35 AND NR35	40.0	40.0
LPDL40, UBL40 AND NR40	45.0	45.0
LPDL45, UBL45 AND NR45	50.0	50.0
MODEL	A	B