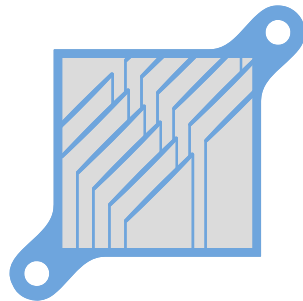




UBR Series UBL Series

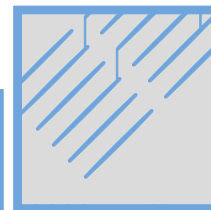
Low Pressure Drop and
Low Thermal Resistance Heat Sink
with Mounting Tabs

ALPHA

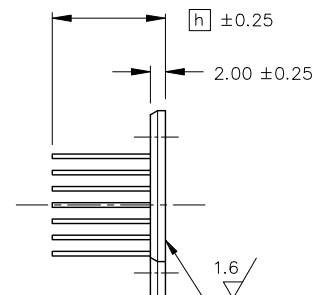
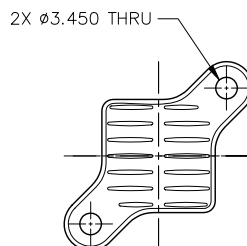
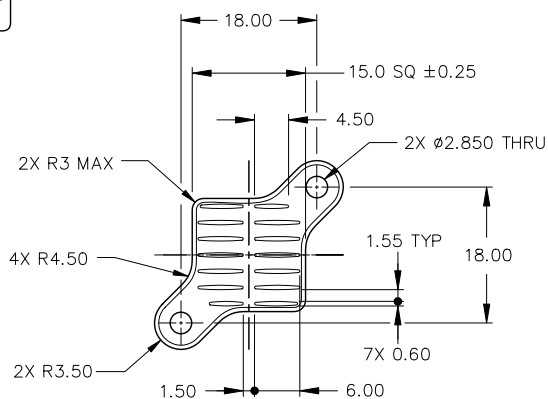
ALPHA

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

UBR15



DIM



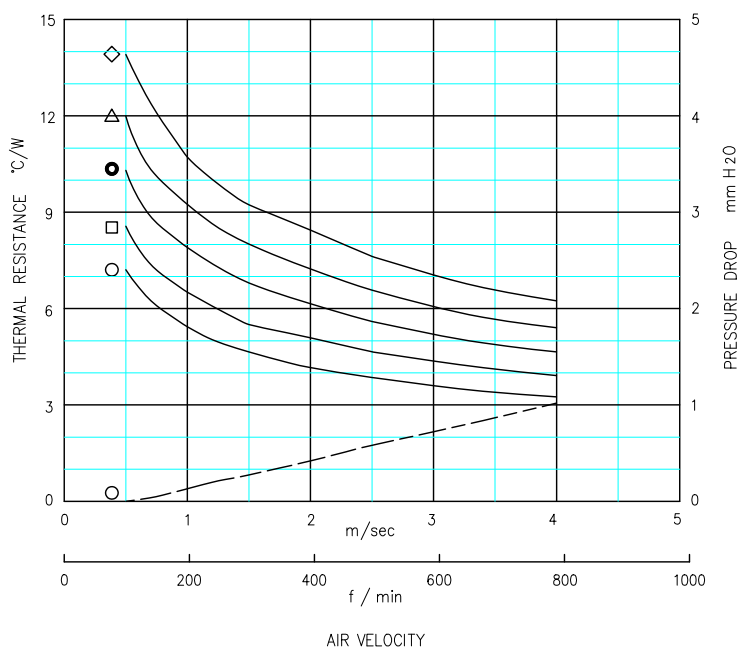
UBR15-XXBC
FOR $\phi 2.500 \pm 0.05$ PCB HOLES

UBR15-XXB
FOR $\phi 3.175 \pm 0.05$ PCB HOLES

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT h	WEIGHT (grams)
UBR15-8BC, UBR15-8B	8	2.3
UBR15-10BC, UBR15-10B	10	2.5
UBR15-12BC, UBR15-12B	12	2.7
UBR15-15BC, UBR15-15B	15	3.0
UBR15-20BC, UBR15-20B	20	3.6

DATA



- ◇ UBR15-8BC, UBR15-8B
- △ UBR15-10BC, UBR15-10B
- UBR15-12BC, UBR15-12B
- UBR15-15BC, UBR15-15B
- UBR15-20BC, UBR15-20B

● 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.

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URL : <https://www.micforg.co.jp>

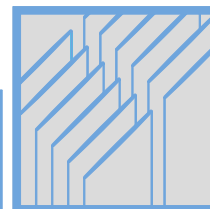
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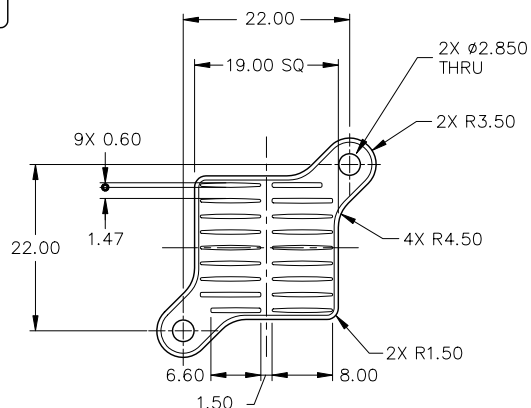
ALPHA

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

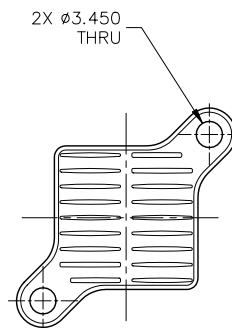
UBR19



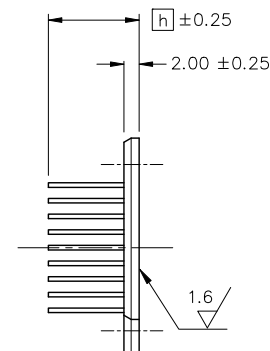
DIM



UBR19-XXBC
FOR Ø2.500 ±0.05 PCB HOLES



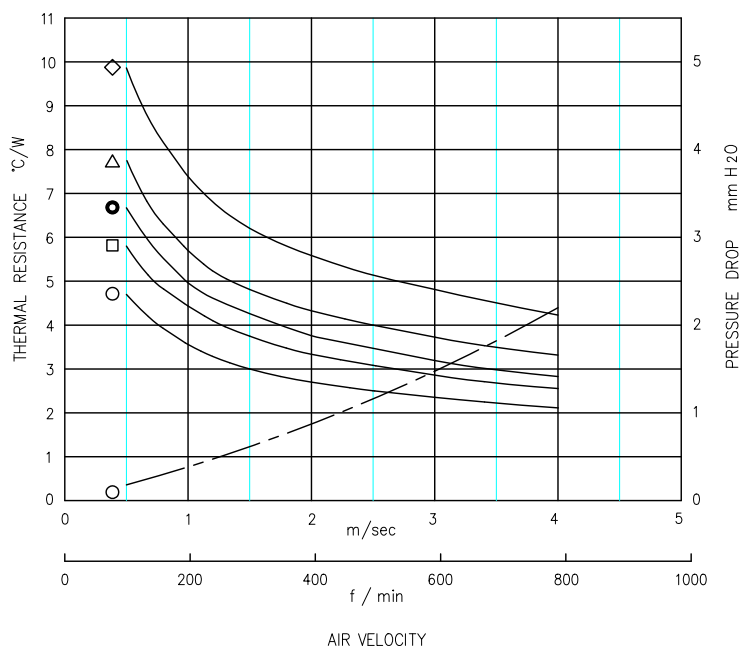
UBR19-XXB
FOR Ø3.175 ±0.05 PCB HOLES



MODEL	HEIGHT [h]	WEIGHT (grams)
UBR19-8BC, UBR19-8B	8	3.4
UBR19-10BC, UBR19-10B	10	3.8
UBR19-12BC, UBR19-12B	12	4.2
UBR19-15BC, UBR19-15B	15	4.7
UBR19-20BC, UBR19-20B	20	5.6

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



◇ UBR19-8BC, UBR19-8B
△ UBR19-10BC, UBR19-10B
● UBR19-12BC, UBR19-12B
□ UBR19-15BC, UBR19-15B
○ UBR19-20BC, 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.

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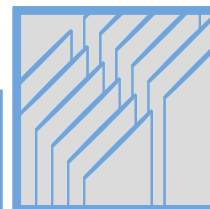
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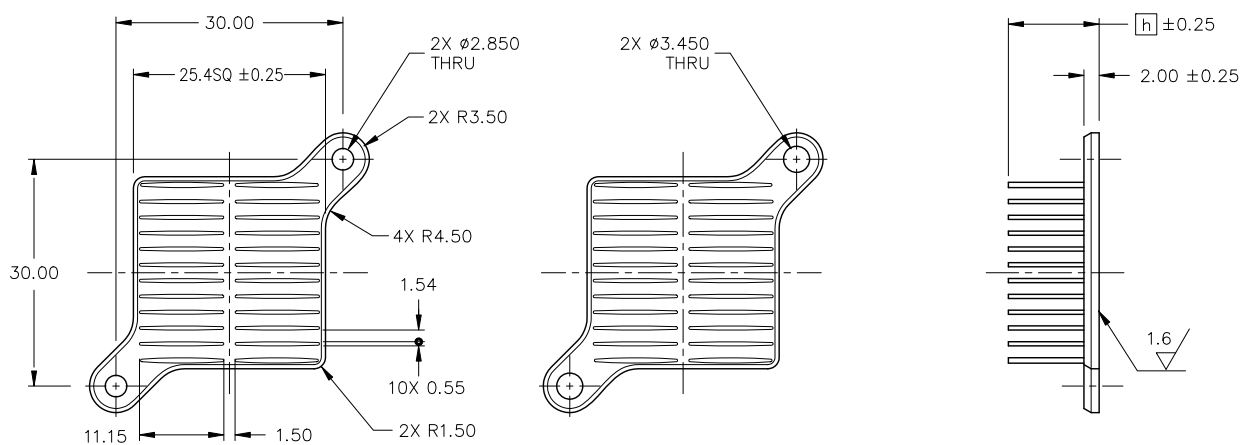
ALPHA

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

UBR25



DIM



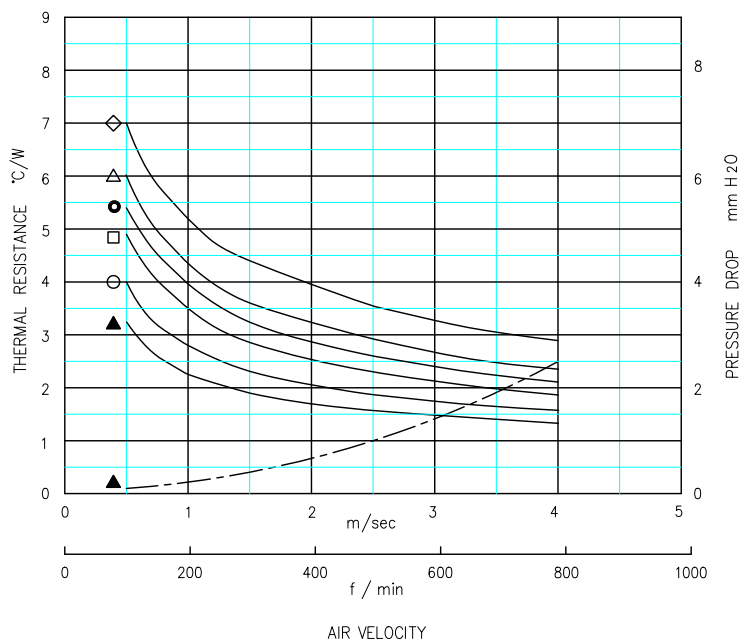
UBR25-XXBC
FOR Ø2.500 ±0.05 PCB HOLES

UBR25-XXB
FOR Ø3.175 ±0.05 PCB HOLES

MODEL	HEIGHT [h]	WEIGHT (grams)
UBR25-8BC, UBR25-8B	8	6.0
UBR25-10BC, UBR25-10B	10	6.7
UBR25-12BC, UBR25-12B	12	7.4
UBR25-15BC, UBR25-15B	15	8.5
UBR25-20BC, UBR25-20B	20	10.2
UBR25-25BC, UBR25-25B	25	11.9

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



- ◇ UBR25-8BC, UBR25-8B
- △ UBR25-10BC, UBR25-10B
- UBR25-12BC, UBR25-12B
- UBR25-15BC, UBR25-15B
- UBR25-20BC, UBR25-20B
- ▲ UBR25-25BC, UBR25-25B

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

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

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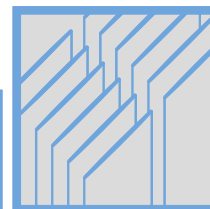
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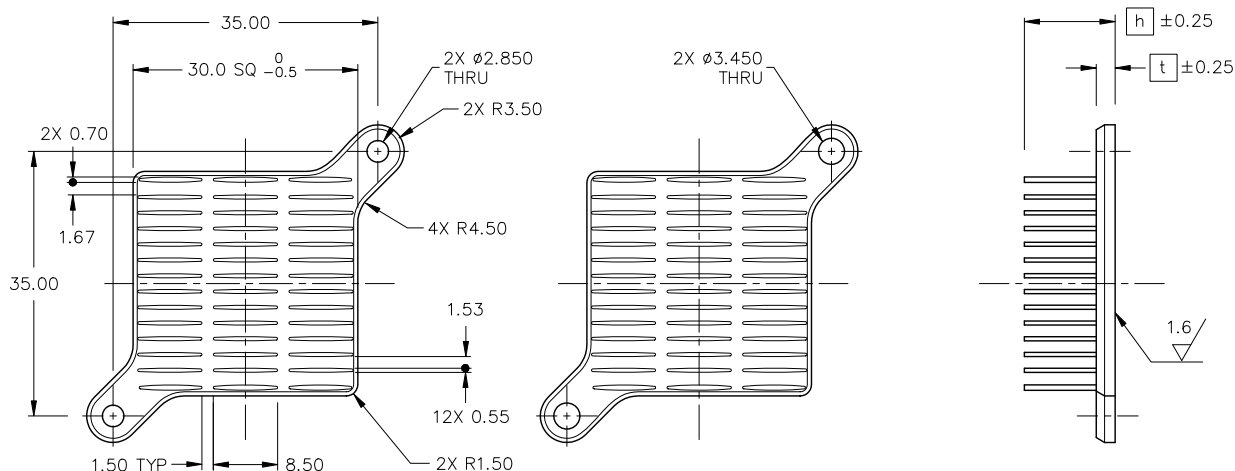
ALPHA

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

UBR30



DIM



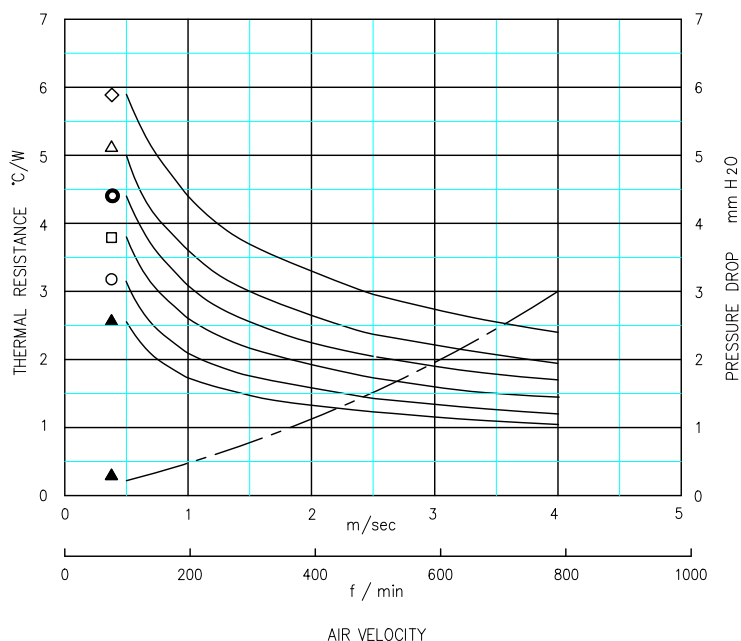
UBR30-XXBC
FOR Ø2.500 ±0.05 PCB HOLES

UBR30-XXB
FOR Ø3.175 ±0.05 PCB HOLES

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

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



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

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

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

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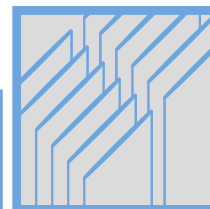
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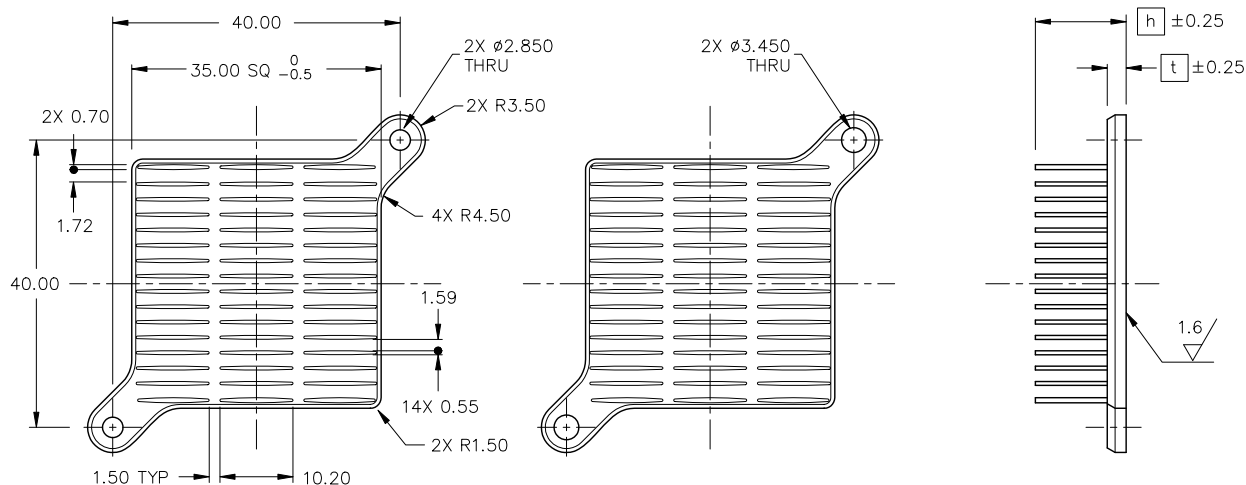
ALPHA

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

UBR35



DIM



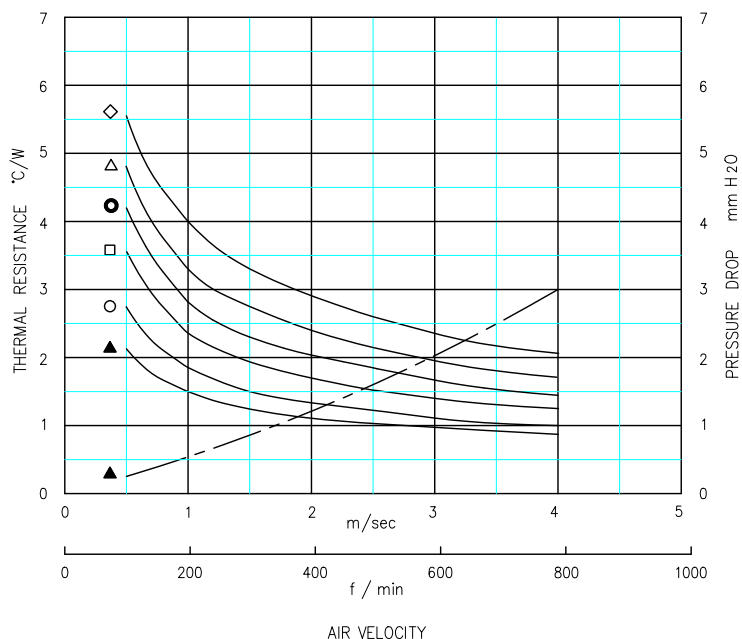
UBR35-XXBC
FOR $\phi 2.500 \pm 0.05$ PCB HOLES

UBR35-XXB
FOR $\phi 3.175 \pm 0.05$ PCB HOLES

MODEL	HEIGHT h	THICKNESS t	WEIGHT (grams)
UBR35-8BC, UBR35-8B	8	2.00	10.8
UBR35-10BC, UBR35-10B	10	3.00	14.9
UBR35-12BC, UBR35-12B	12		16.2
UBR35-15BC, UBR35-15B	15		18.1
UBR35-20BC, UBR35-20B	20		21.2
UBR35-25BC, UBR35-25B	25	3.00	24.4
UBR35- h BC, UBR35- h B	$h \leq 8$	2.00	-
	$8 < h$	3.00	-

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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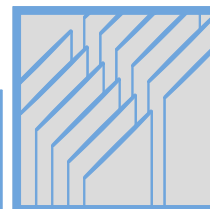
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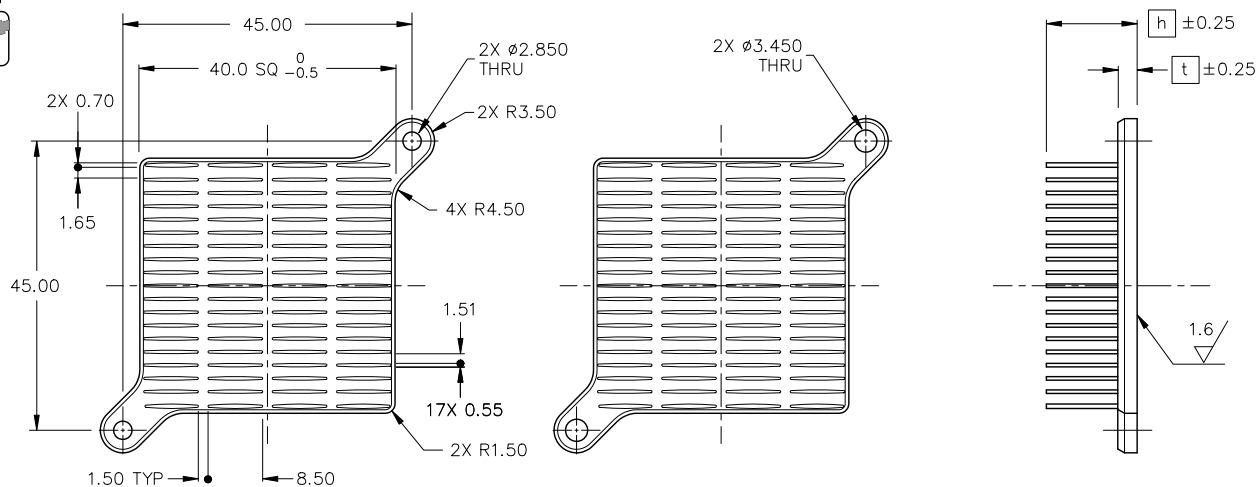
ALPHA

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

UBR40



DIM



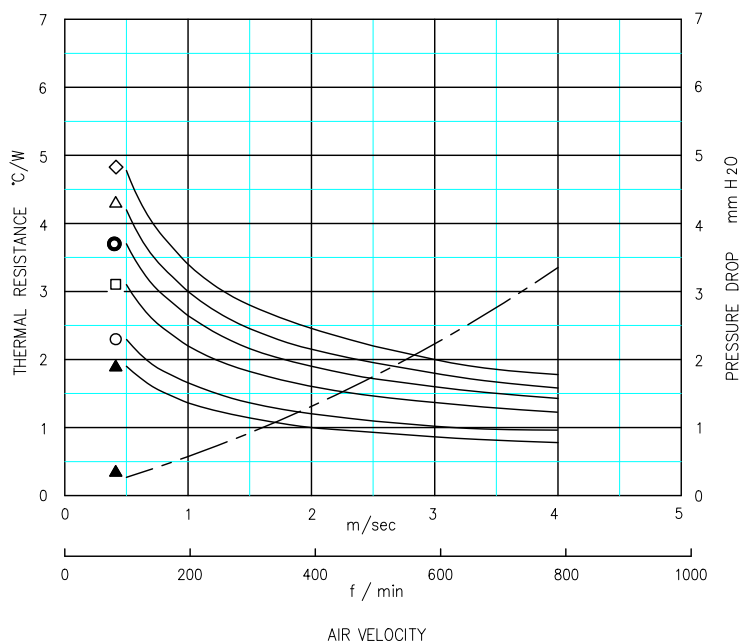
UBR40-XXBC
FOR $\phi 2.500 \pm 0.05$ PCB HOLES

UBR40-XXB
FOR $\phi 3.175 \pm 0.05$ PCB HOLES

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

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



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

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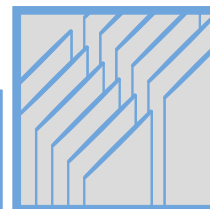
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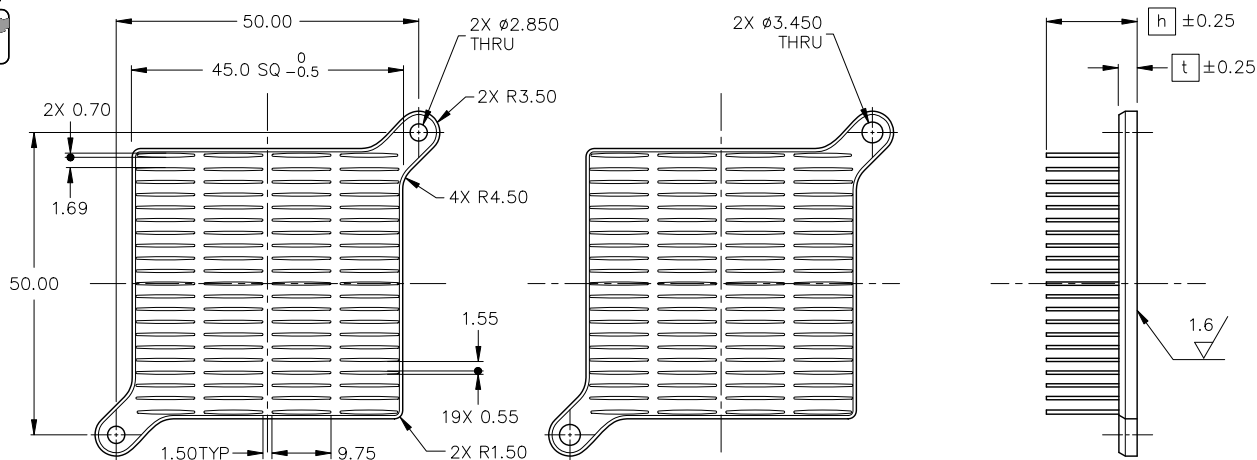
ALPHA

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

UBR45



DIM



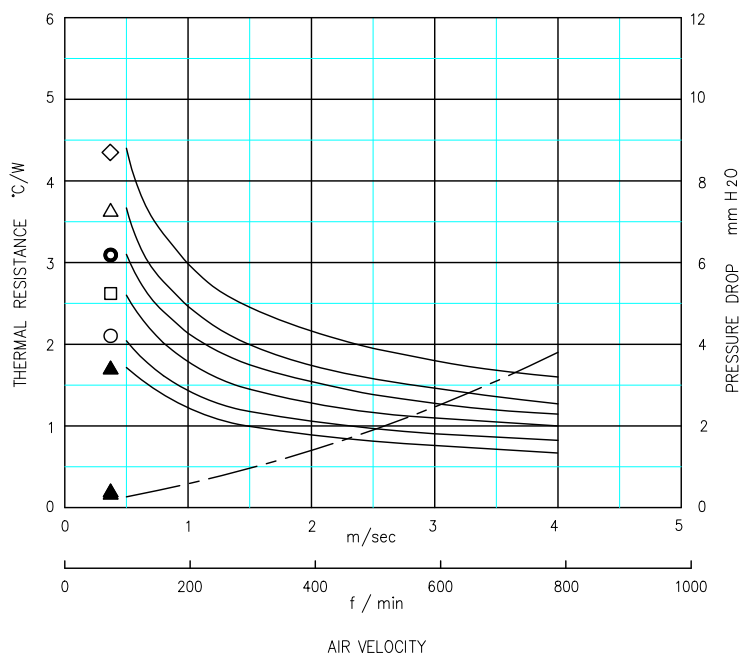
UBR45-XXBC
FOR Ø2.500 ±0.05 PCB HOLES

UBR45-XXB
FOR Ø3.175 ±0.05 PCB HOLES

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

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



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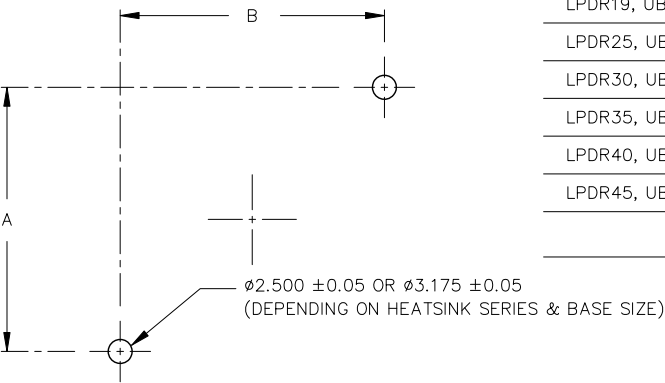
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REF



PCB HOLE LAYOUT

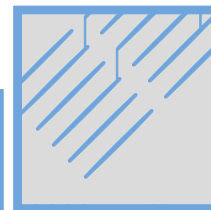


LPDR15 AND UBR15	18.0	18.0
LPDR19, UBR19 AND SR19	22.0	22.0
LPDR25, UBR25, NR25 AND SR25	30.0	30.0
LPDR30, UBR30, NR30 AND SR30	35.0	35.0
LPDR35, UBR35, NR35 AND SR35	40.0	40.0
LPDR40, UBR40, NR40 AND SR40	45.0	45.0
LPDR45, UBR45 AND NR45	50.0	50.0
MODEL	A	B

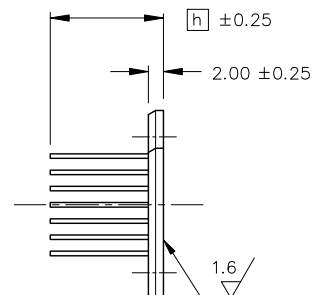
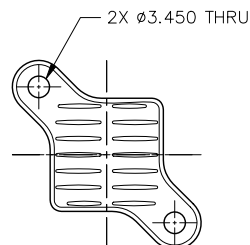
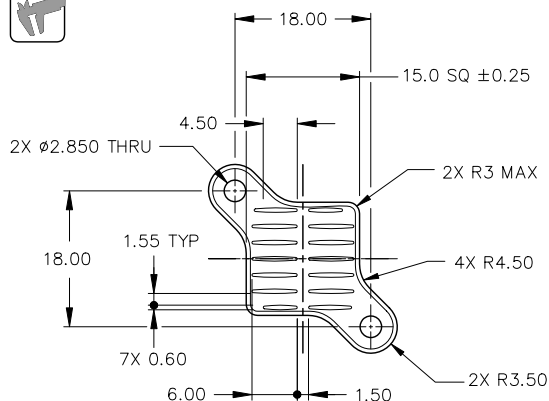
ALPHA

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

UBL15



DIM



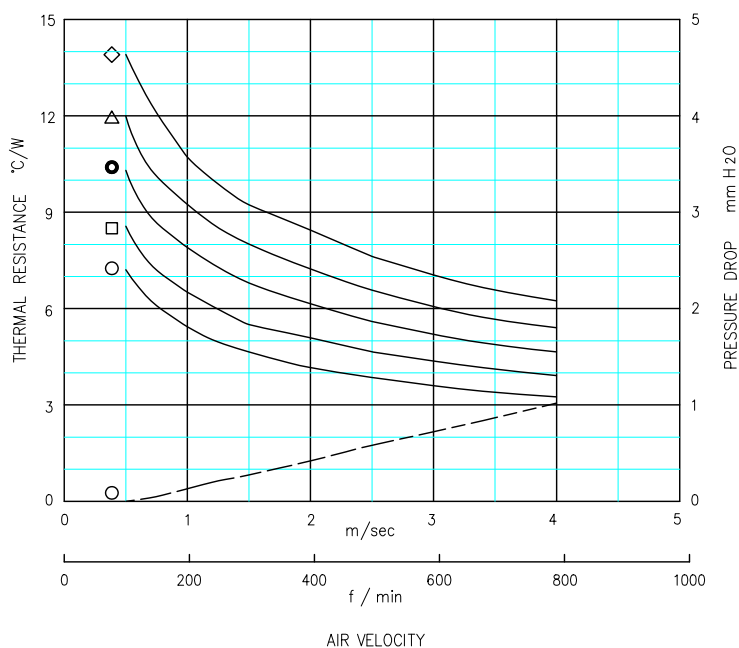
UBL15-XXBC
FOR $\phi 2.500 \pm 0.05$ PCB HOLES

UBL15-XXB
FOR $\phi 3.175 \pm 0.05$ PCB HOLES

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

MODEL	HEIGHT [h]	WEIGHT (grams)
UBL15-8BC, UBL15-8B	8	2.3
UBL15-10BC, UBR15-10B	10	2.5
UBL15-12BC, UBR15-12B	12	2.7
UBL15-15BC, UBR15-15B	15	3.0
UBL15-20BC, UBR15-20B	20	3.6

DATA



- ◇ UBL15-8BC, UBL15-8B
- △ UBL15-10BC, UBL15-10B
- UBL15-12BC, UBL15-12B
- UBL15-15BC, UBL15-15B
- UBL15-20BC, UBL15-20B

● 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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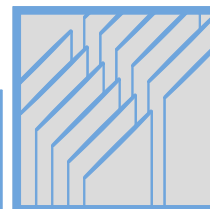
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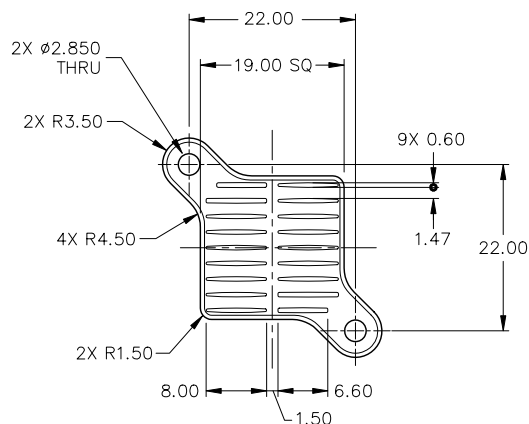
ALPHA

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

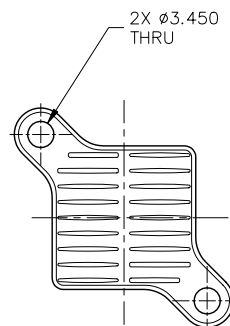
UBL19



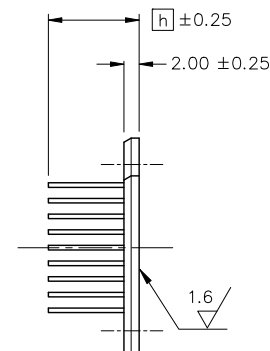
DIM



UBL19-XXBC
FOR Ø2.500 ±0.05 PCB HOLES

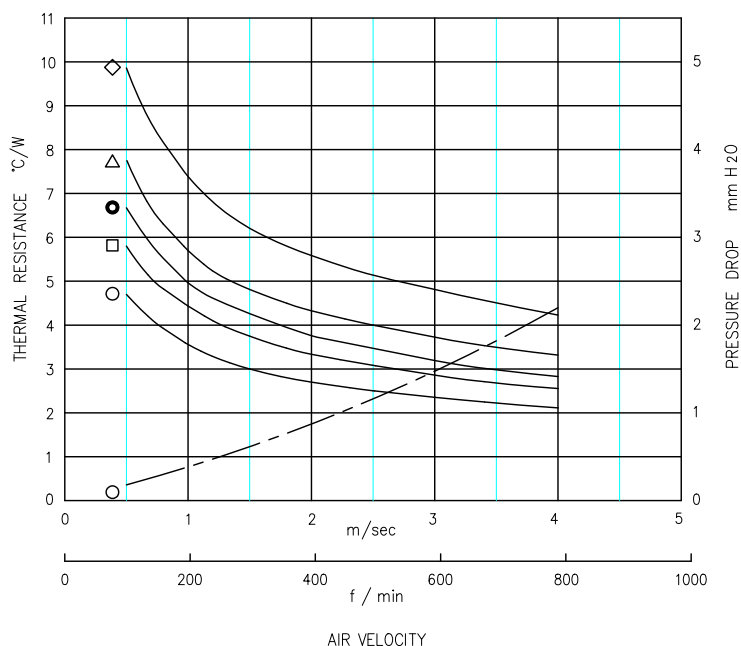


UBL19-XXB
FOR Ø3.175 ±0.05 PCB HOLES



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

DATA



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

● 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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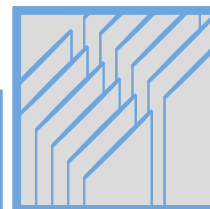
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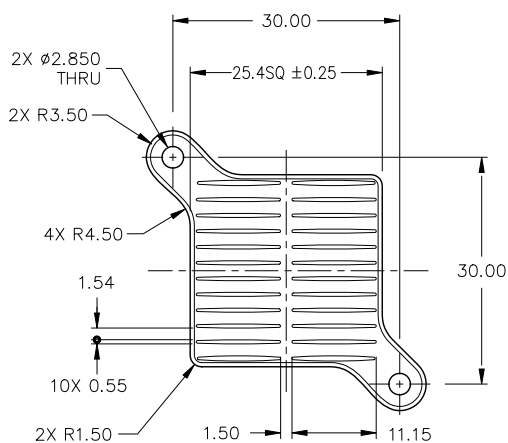
ALPHA

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

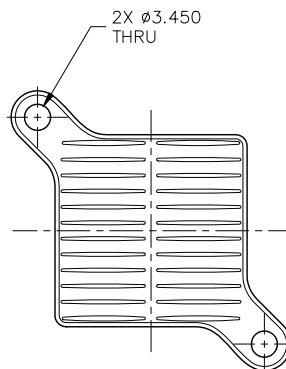
UBL25



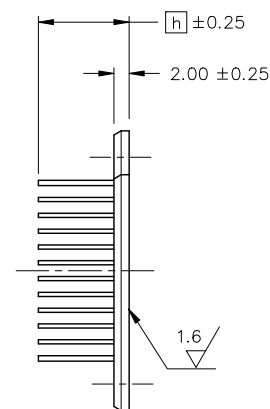
DIM



UBL25-XXBC
FOR Ø2.500 ± 0.05 PCB HOLES



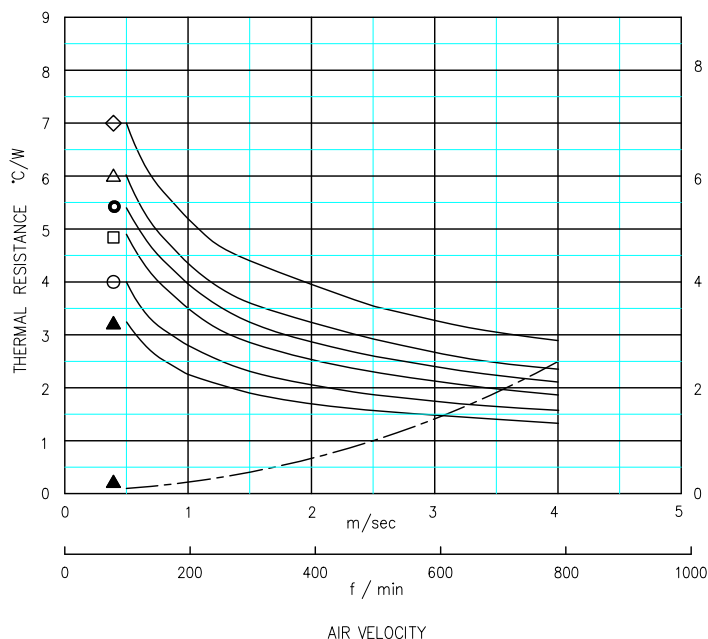
UBL25-XXB
FOR Ø3.175 ± 0.05 PCB HOLES



MODEL	HEIGHT [h]	WEIGHT (grams)
UBL25-8BC, UBL25-8B	8	6.0
UBL25-10BC, UBL25-10B	10	6.7
UBL25-12BC, UBL25-12B	12	7.4
UBL25-15BC, UBL25-15B	15	8.5
UBL25-20BC, UBL25-20B	20	10.2
UBL25-25BC, UBL25-25B	25	11.9

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



- ◇ UBL25-8BC, UBL25-8B
- △ UBL25-10BC, UBL25-10B
- UBL25-12BC, UBL25-12B
- UBL25-15BC, UBL25-15B
- UBL25-20BC, UBL25-20B
- ▲ UBL25-25BC, UBL25-25B

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

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

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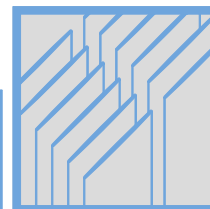
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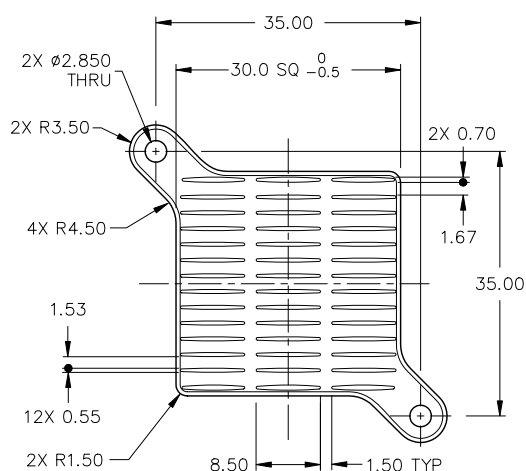
ALPHA

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

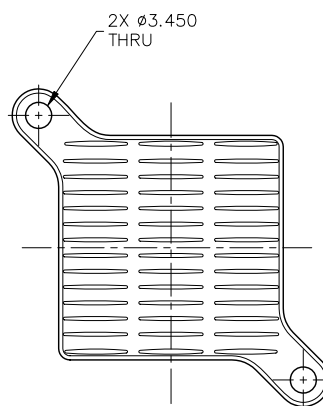
UBL30



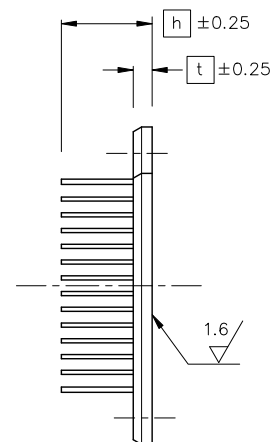
DIM



UBL30-XXBC
FOR Ø2.500 ±0.05 PCB HOLES



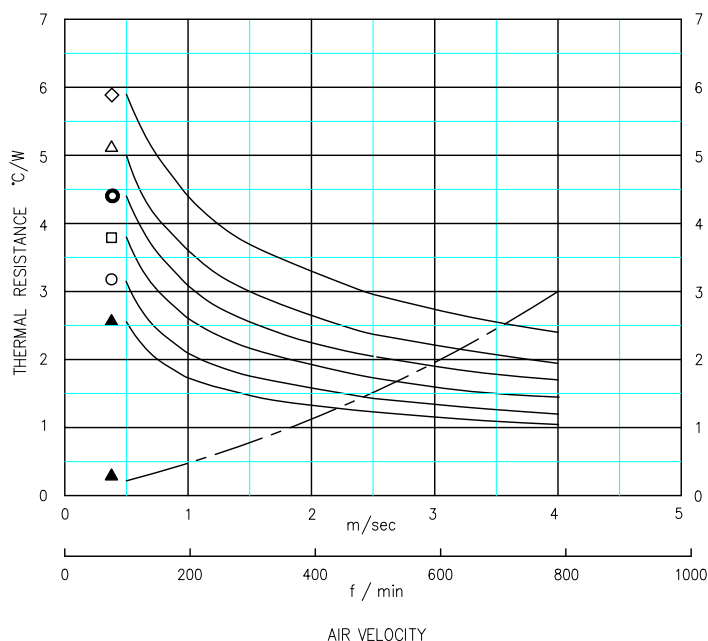
UBL30-XXB
FOR Ø3.175 ±0.05 PCB HOLES



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

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



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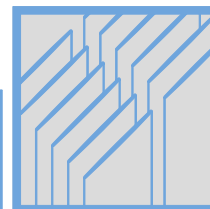
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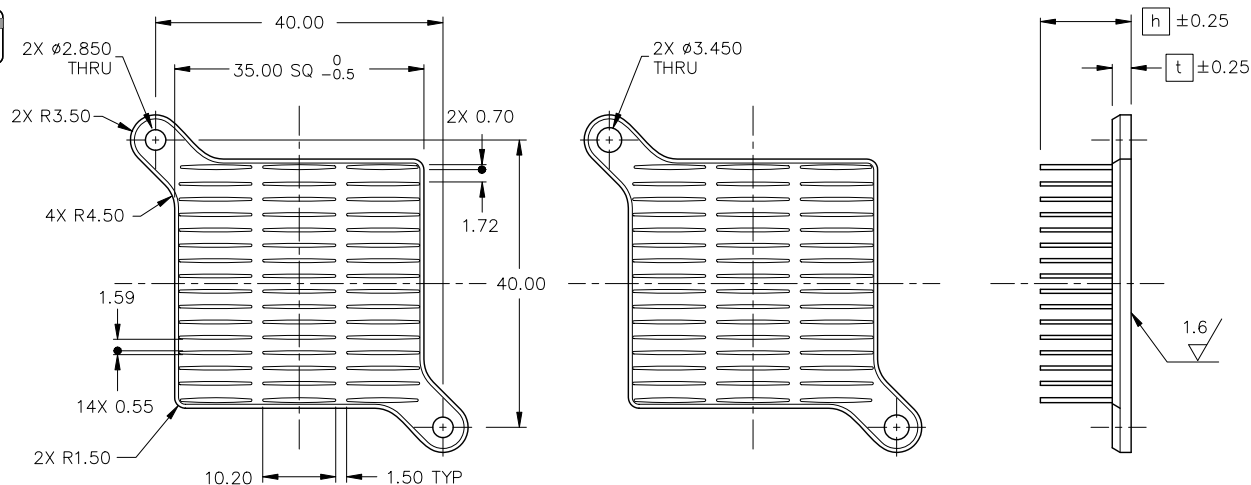
ALPHA

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

UBL35



DIM



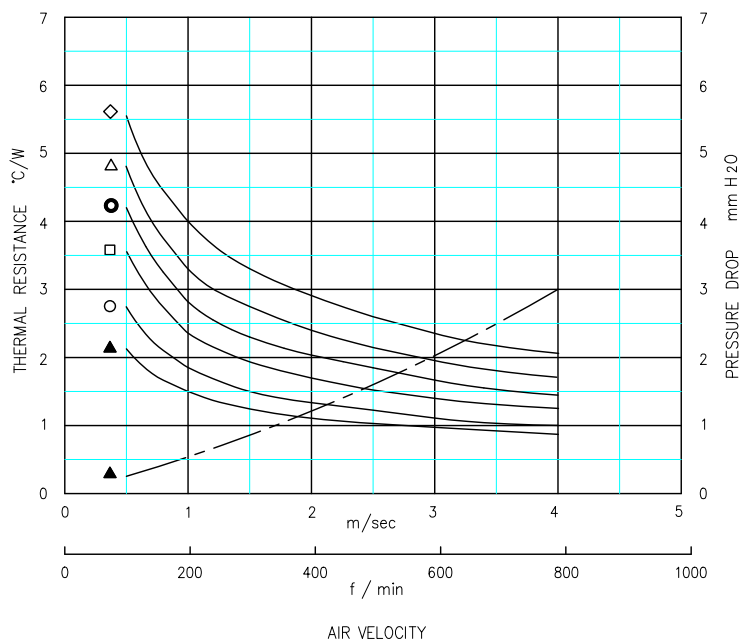
UBL35-XXBC
FOR $\phi 2.500 \pm 0.05$ PCB HOLES

UBL35-XXB
FOR $\phi 3.175 \pm 0.05$ PCB HOLES

MODEL	HEIGHT h	THICKNESS t	WEIGHT (grams)
UBL35-8BC, UBL35-8B	8	2.00	10.8
UBL35-10BC, UBL35-10B	10	3.00	14.9
UBL35-12BC, UBL35-12B	12		16.2
UBL35-15BC, UBL35-15B	15		18.1
UBL35-20BC, UBL35-20B	20		21.2
UBL35-25BC, UBL35-25B	25	3.00	24.4
UBL35- h BC, UBL35- h B	$h \leq 8$	2.00	-
	$8 < h$	3.00	-

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



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

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

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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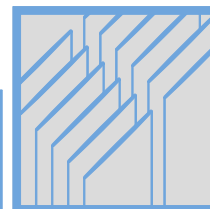
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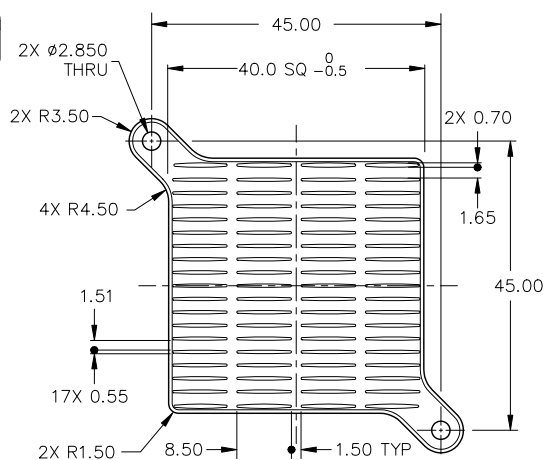
ALPHA

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

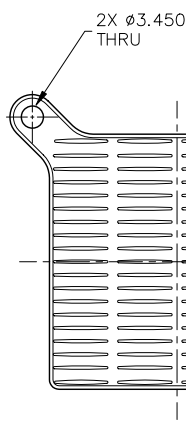
UBL40



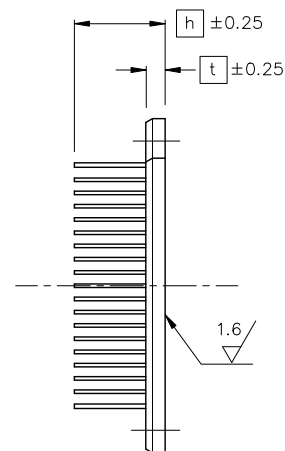
DIM



UBL40-XXBC
FOR Ø2.500 ±0.05 PCB HOLES



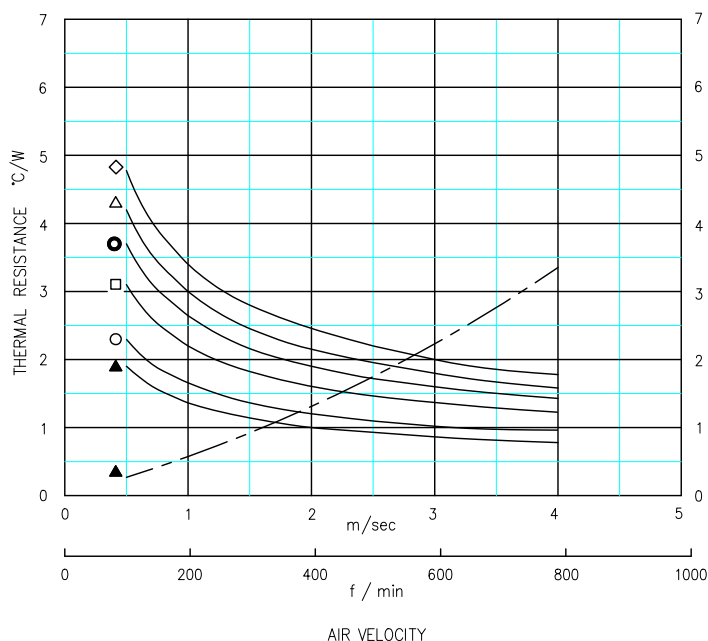
UBL40-XXB
FOR Ø3.175 ±0.05 PCB HOLES



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

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



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

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

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

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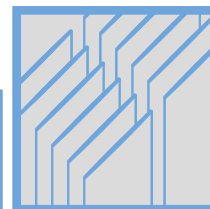
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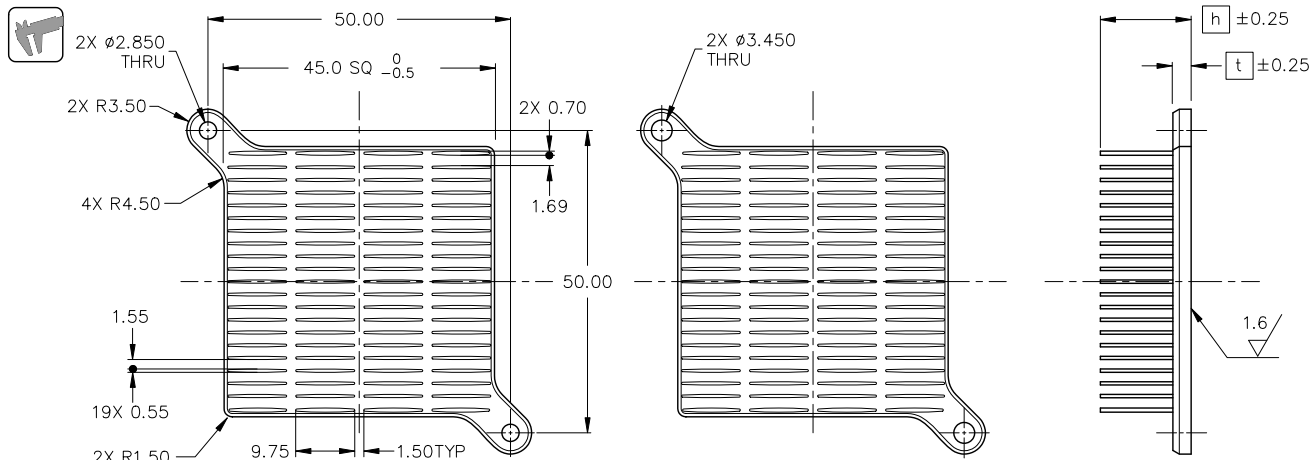
ALPHA

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

UBL 45



DIM



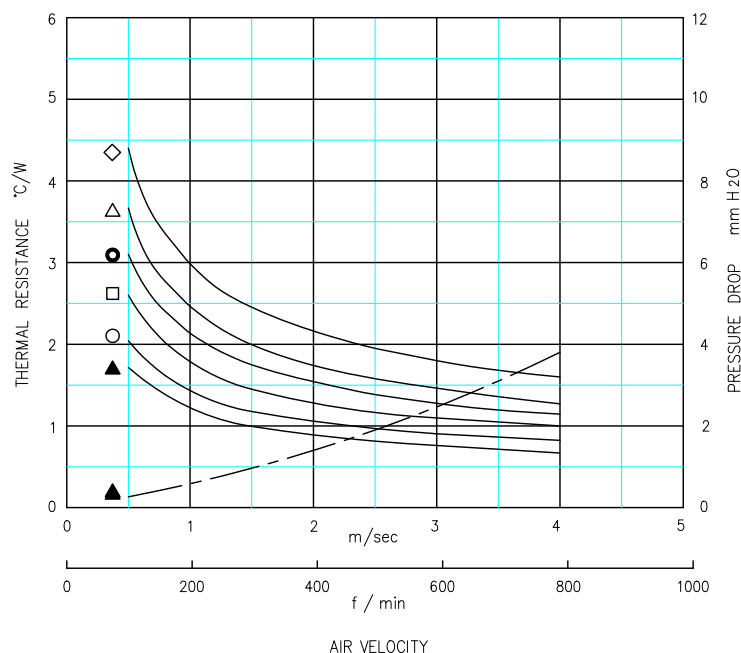
UBL45-XXBC
FOR $\phi 2.500 \pm 0.05$ PCB HOLES

UBL45-XXB
FOR $\phi 3.175 \pm 0.05$ PCB HOLES

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

MATERIAL : A6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



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

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

■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
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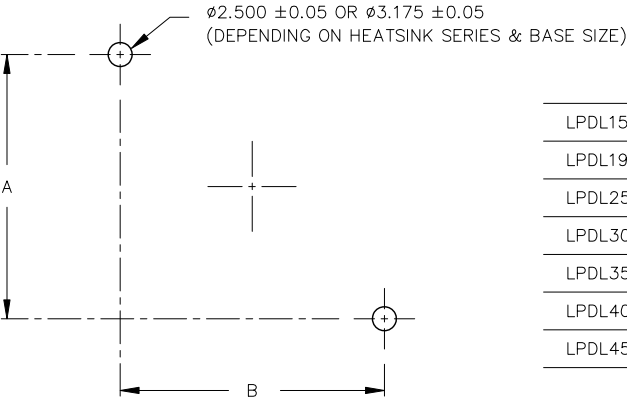
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REF



PCB HOLE LAYOUT



LPDL15 AND UBL15	18.0	18.0
LPDL19, UBL19 AND SR19	22.0	22.0
LPDL25, UBL25, NR25 AND SR25	30.0	30.0
LPDL30, UBL30, NR30 AND SR30	35.0	35.0
LPDL35, UBL35, NR35 AND SR35	40.0	40.0
LPDL40, UBL40, NR40 AND SR40	45.0	45.0
LPDL45, UBL45 AND NR45	50.0	50.0
MODEL	A	B