

UBM_S Series
UBH_S Series
UB_S Series

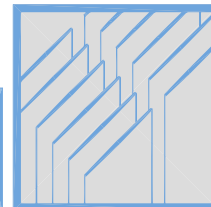
Low Pressure Drop and
Low Thermal Resistance Heat Sink
with Attachment Holes

ALPHA

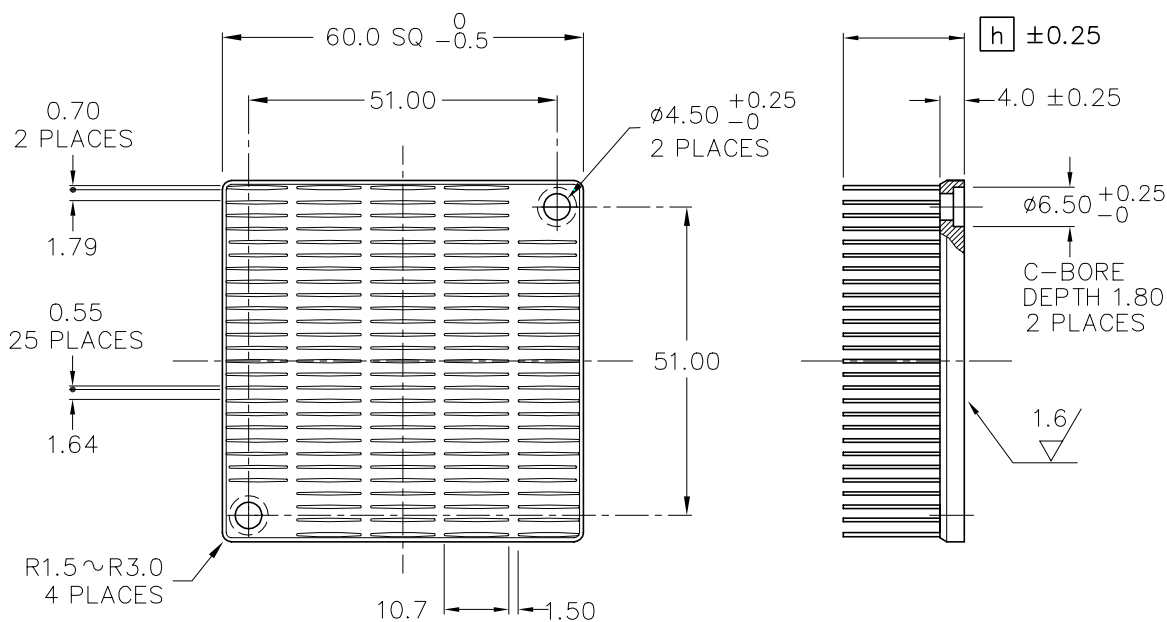
ALPHA

Low Pressure Drop and
Low Thermal Resistance Heat Sink
with attachment holes

UBM60S



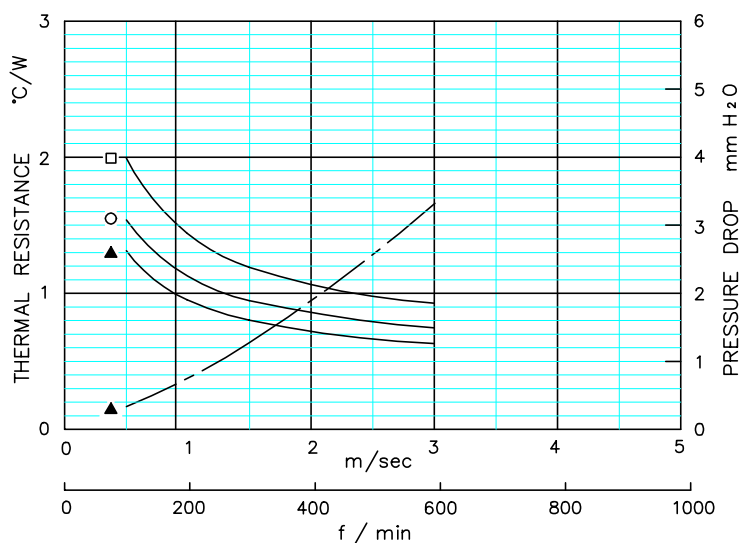
DIM



MODEL	HEIGHT h	WEIGHT (grams)
UBM60S-15B	15	56.8
UBM60S-20B	20	64.8
UBM60S-25B	25	72.8

MATERIAL : A 6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



AIR VELOCITY: DUCTED CONDITION

- UBM60S-15B
- UBM60S-20B
- ▲ UBM60S-25B

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

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

Alpha Company Ltd.

256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
PHONE +81(55)966 0789
FAX +81(55)966 9192
E mail : alpha@micforg.co.jp
URL : <http://www.micforg.co.jp>

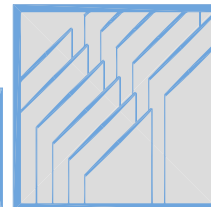
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

473 Sapena Ct. #12 Santa Clara, CA 95054 USA
PHONE +1(408)567-8082
FAX +1(408)567-8053
E mail : sales@alphanovatech.com
URL : <http://www.alphanovatech.com>

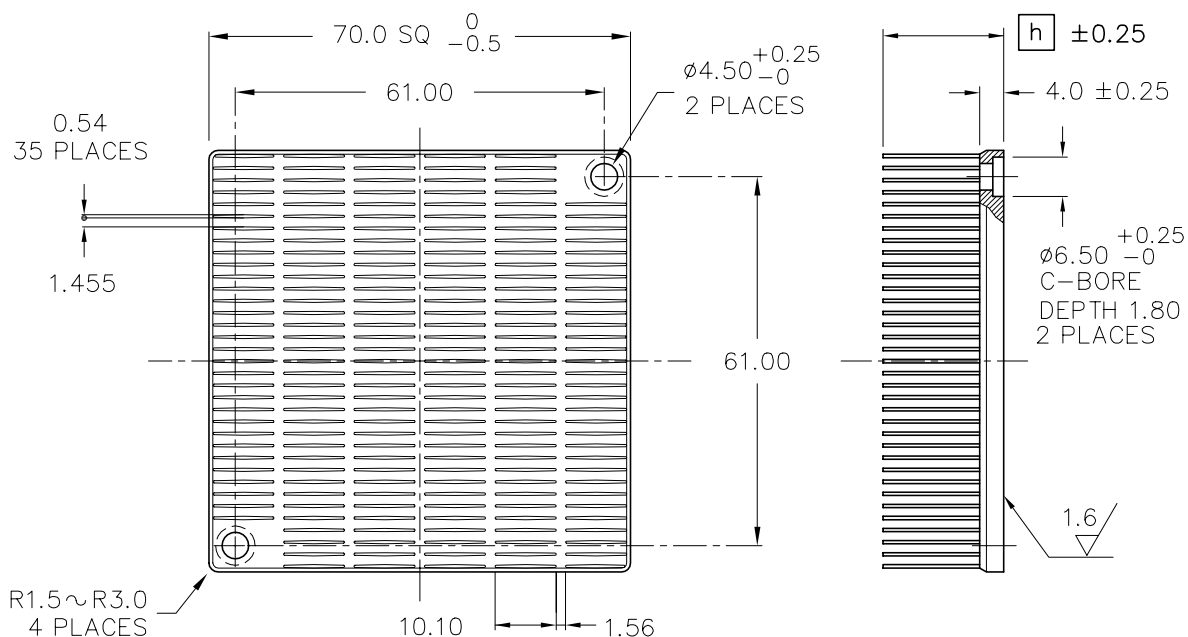
ALPHA

Low Pressure Drop and
Low Thermal Resistance Heat Sink
with attachment holes

UBM70S



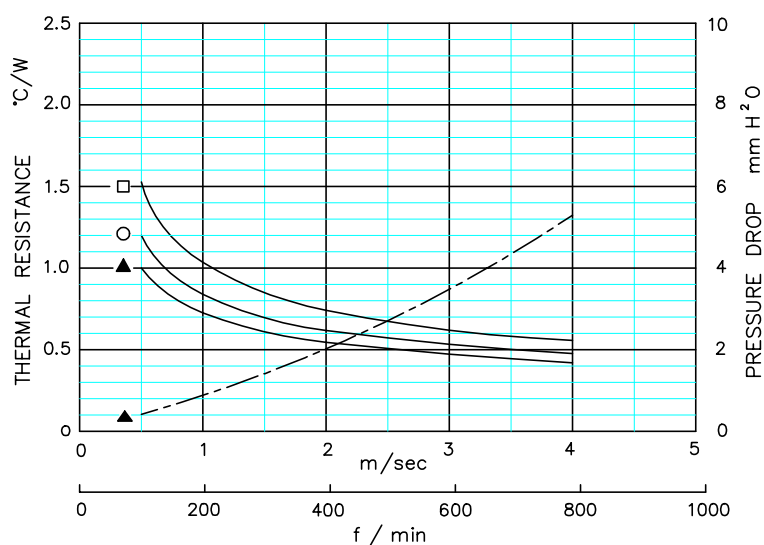
DIM



MODEL	HEIGHT h	WEIGHT (grams)
UBM70S-15B	15	97.0
UBM70S-20B	20	108.7
UBM70S-25B	25	120.4

MATERIAL : A 6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



□ UBM70S-15B
○ UBM70S-20B
▲ UBM70S-25B

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

AIR VELOCITY: DUCTED CONDITION

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

Alpha Company Ltd.

256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
PHONE +81(55)966 0789
FAX +81(55)966 9192
E mail : alpha@micforg.co.jp
URL : <http://www.micforg.co.jp>

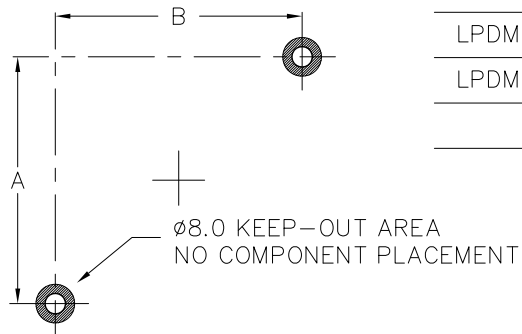
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

473 Sapena Ct. #12 Santa Clara, CA 95054 USA
PHONE +1(408)567-8082
FAX +1(408)567-8053
E mail : sales@alphanovatech.com
URL : <http://www.alphanovatech.com>

REF



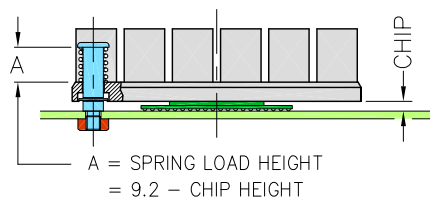
● BOARD KEEPOUT PATTERNS



LPDM60S AND UBM60S	51.0	51.0
LPDM70S AND UBM70S	61.0	61.0
MODEL	A	B

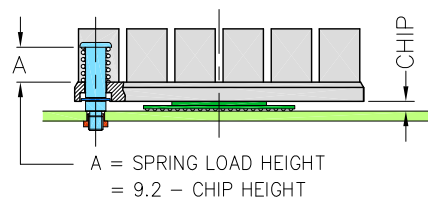
● INSTALLATION

USE HEX NUTS M3x0.5



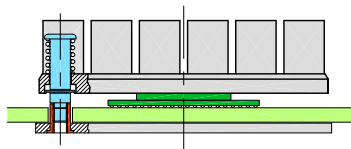
REQUIRES $\phi 3.30$ THRU HOLES IN BOARD.
RECOMMENDED P.C.B THICKNESS 1.6mm.
MINIMUM CHIP HEIGHT 1.5mm.

USE *MAC8* TH-1.6-XX-M3



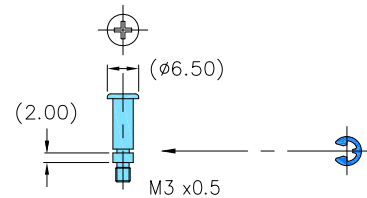
REQUIRES $\phi 3.70$ THRU HOLES IN BOARD.
MAC8 THREAD INSERT NEED THE SOLDERING.
RECOMMENDED P.C.B THICKNESS
MINIMUM 1.6mm ~ MAXIMUM 3.7mm
MINIMUM CHIP HEIGHT 1.5mm.

USE CUSTOM BACKING-PLATE



CUSTOM DESIGN FOR ANY PCB THICKNESS.

SHOULDER-SCREW/RETAINING RING E-2.5

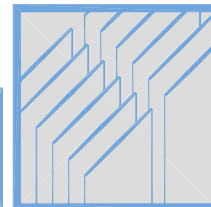


REFER TO THE DRAWING FOR DETAIL SPECIFICATION.

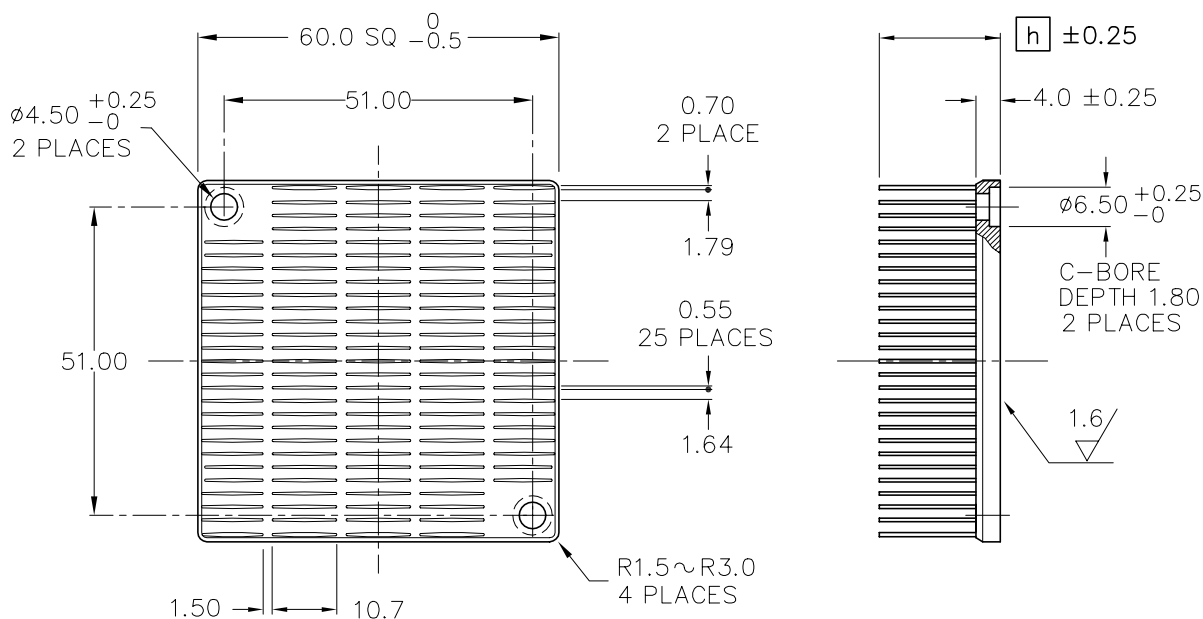
ALPHA

Low Pressure Drop and
Low Thermal Resistance Heat Sink
with attachment holes

UBH60S



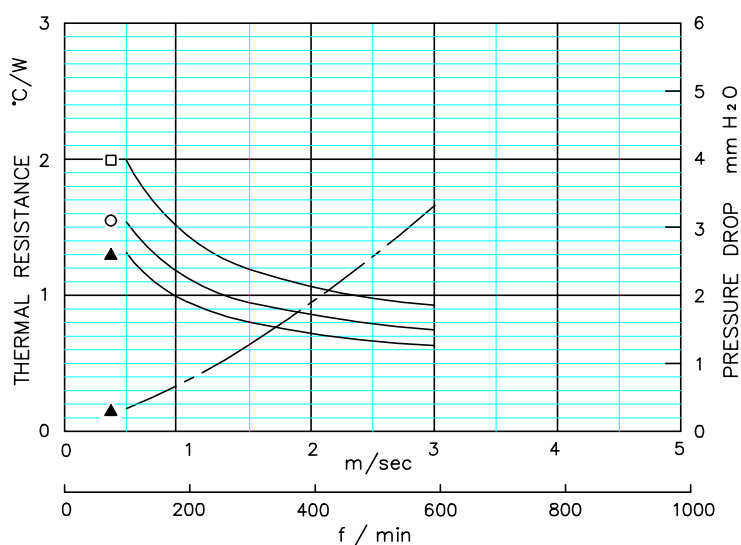
DIM



MODEL	HEIGHT h	WEIGHT (grams)
UBH60S-15B	15	56.8
UBH60S-20B	20	64.8
UBH60S-25B	25	72.8

MATERIAL : A 6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



AIR VELOCITY: DUCTED CONDITION

□ UBH60S-15B
○ UBH60S-20B
▲ UBH60S-25B

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

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

Alpha Company Ltd.

256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
PHONE +81(55)966 0789
FAX +81(55)966 9192
E mail : alpha@micforg.co.jp
URL : <http://www.micforg.co.jp>

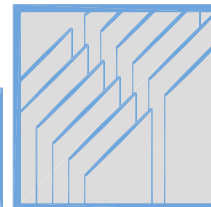
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

473 Sapena Ct. #12 Santa Clara, CA 95054 USA
PHONE +1(408)567-8082
FAX +1(408)567-8053
E mail : sales@alphanovatech.com
URL : <http://www.alphanovatech.com>

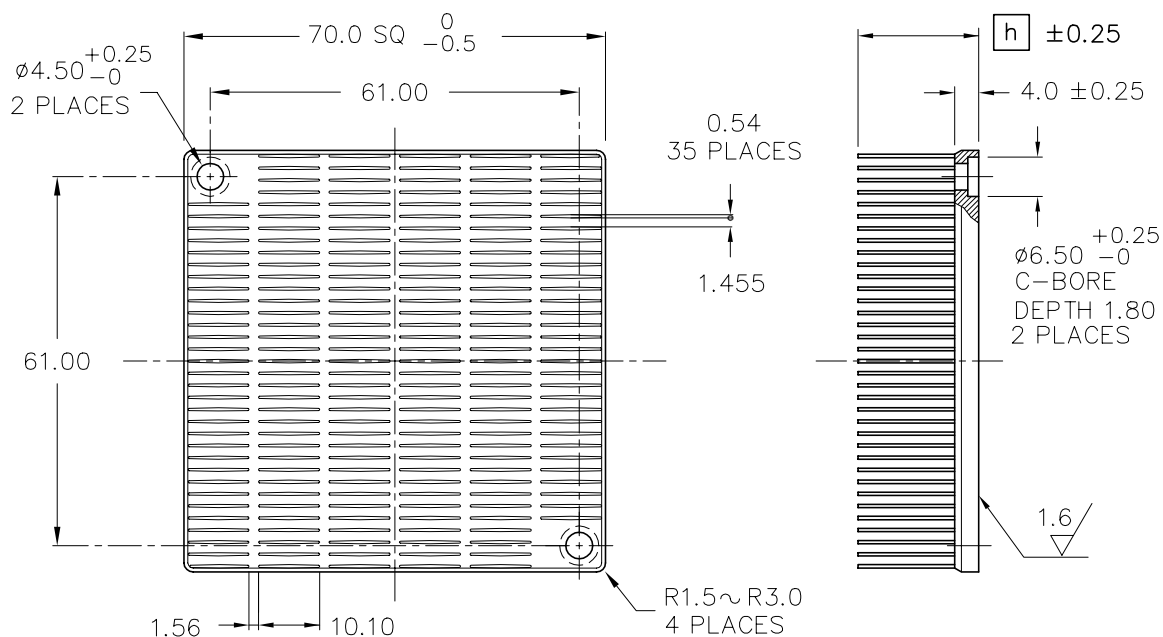
ALPHA

Low Pressure Drop and
Low Thermal Resistance Heat Sink
with attachment holes

UBH70S



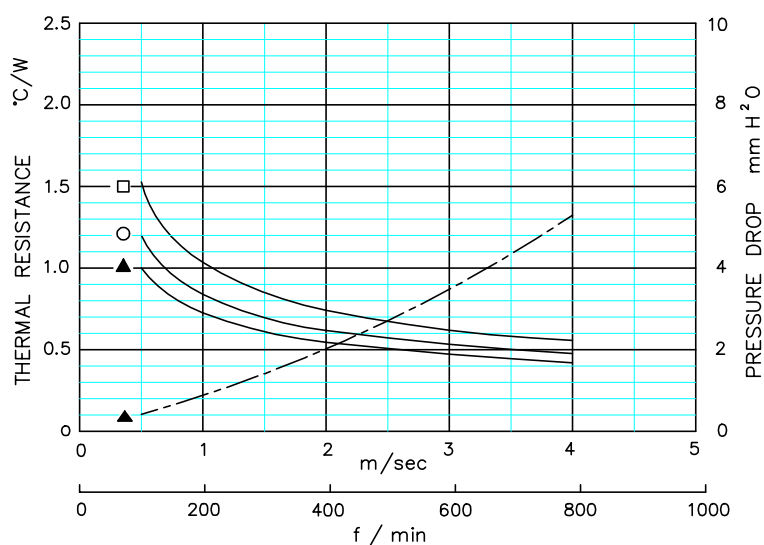
DIM



MODEL	HEIGHT h	WEIGHT (grams)
UBH70S-15B	15	97.0
UBH70S-20B	20	108.7
UBH70S-25B	25	120.4

MATERIAL : A 6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



□ UBH70S-15B
 ○ UBH70S-20B
 ▲ UBH70S-25B
 ● DUCTED CONDITION
 DUMMY HEATER SIZE: 12.7 SQ
 THERMAL RESISTANCE ———
 PRESSURE DROP - - -
 ■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
 REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
PHONE +81(55)966 0789
FAX +81(55)966 9192
E mail : alpha@micforg.co.jp
URL : <http://www.micforg.co.jp>

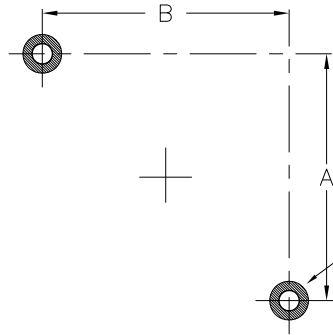
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

473 Sapena Ct. #12 Santa Clara, CA 95054 USA
PHONE +1(408)567-8082
FAX +1(408)567-8053
E mail : sales@alphanovatech.com
URL : <http://www.alphanovatech.com>

REF



● BOARD KEEPOUT PATTERNS

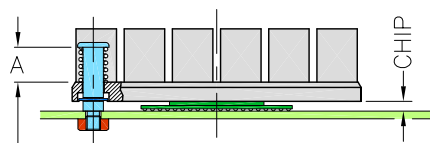


LPDH60S AND UBH60S	51.0	51.0
LPDH70S AND UBH70S	61.0	61.0
MODEL	A	B

ø8.0 KEEP-OUT AREA
NO COMPONENT PLACEMENT

● INSTALLATION

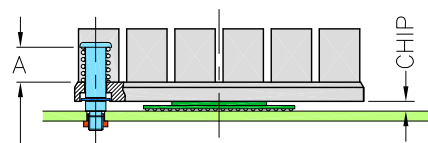
USE HEX NUTS M3x0.5



A = SPRING LOAD HEIGHT
= 9.2 - CHIP HEIGHT

REQUIRES ø3.30 THRU HOLES IN BOARD.
RECOMMENDED P.C.B THICKNESS 1.6mm.
MINIMUM CHIP HEIGHT 1.5mm.

USE *MAC8* TH-1.6-XX-M3

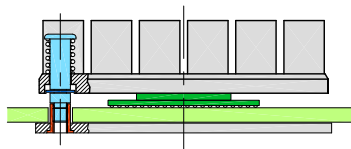


A = SPRING LOAD HEIGHT
= 9.2 - CHIP HEIGHT

REQUIRES ø3.70 THRU HOLES IN BOARD.
MAC8 THREAD INSERT NEED THE SOLDERING.
RECOMMENDED P.C.B THICKNESS

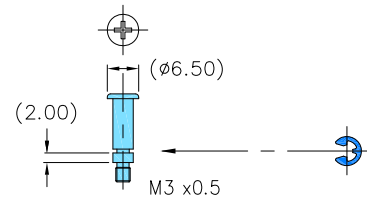
MINIMUM 1.6mm ~ MAXIMUM 3.7mm
MINIMUM CHIP HEIGHT 1.5mm.

USE CUSTOM BACKING-PLATE



CUSTOM DESIGN FOR ANY PCB THICKNESS.

SHOULDER-SCREW/RETAINING RING E-2.5

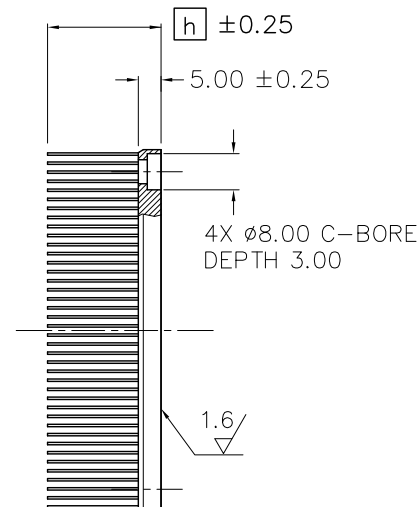
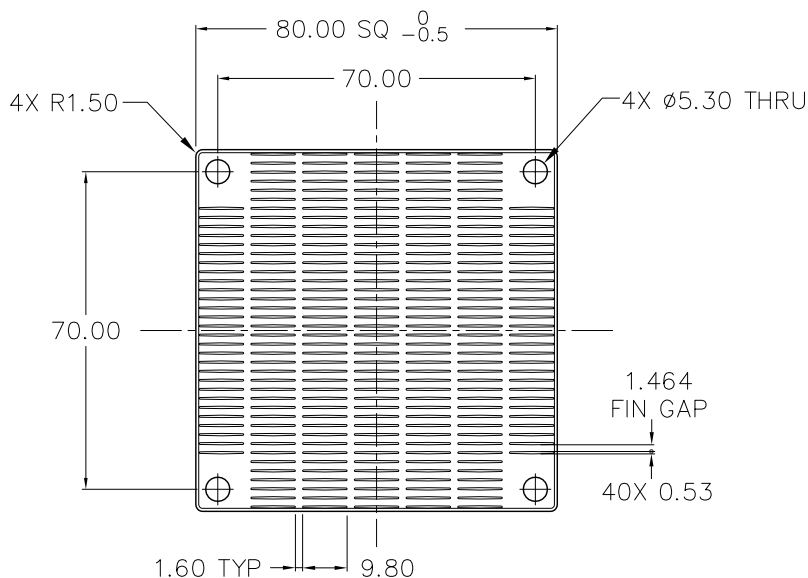
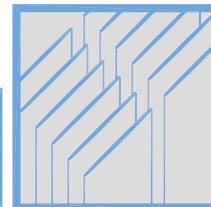


REFER TO THE DRAWING FOR DETAIL SPECIFICATION.

ALPHA

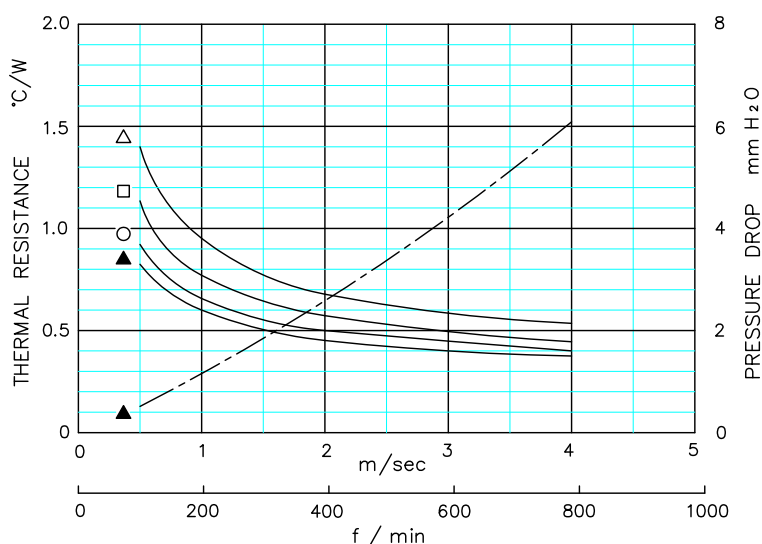
Low Pressure Drop and
Low Thermal Resistance Heat Sink
with attachment holes

UB80S



MODEL	HEIGHT [h]	WEIGHT (grams)
UB80S-15B	15	114.6
UB80S-20B	20	130.3
UB80S-25B	25	146.1
UB80S-30B	30	164.8

MATERIAL : A 6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm



- △ UB80S-15B
- UB80S-20B
- UB80S-25B
- ▲ UB80S-30B

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

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

Alpha Company Ltd.

256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
PHONE +81(55)966 0789
FAX +81(55)966 9192
E mail : alpha@micforg.co.jp
URL : <http://www.micforg.co.jp>

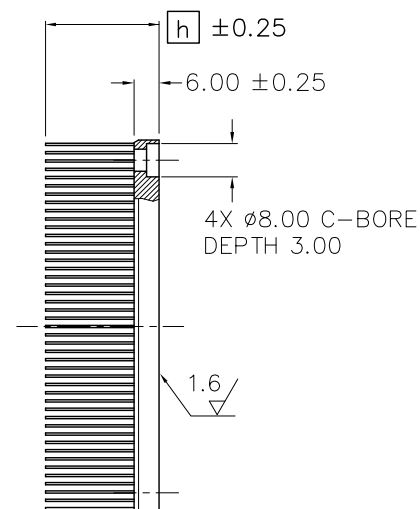
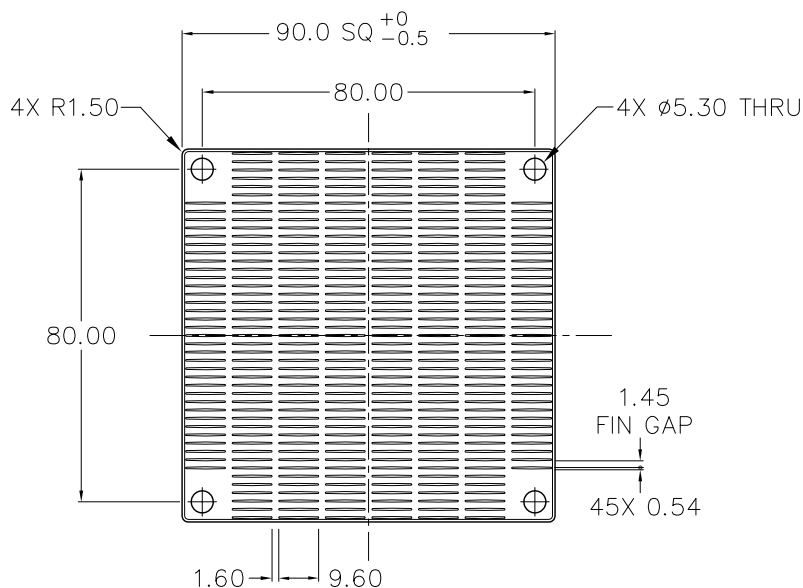
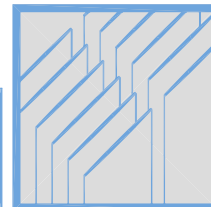
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

473 Sapena Ct. #12 Santa Clara, CA 95054 USA
PHONE +1(408)567-8082
FAX +1(408)567-8053
E mail : sales@alphanovatech.com
URL : <http://www.alphanovatech.com>

ALPHA

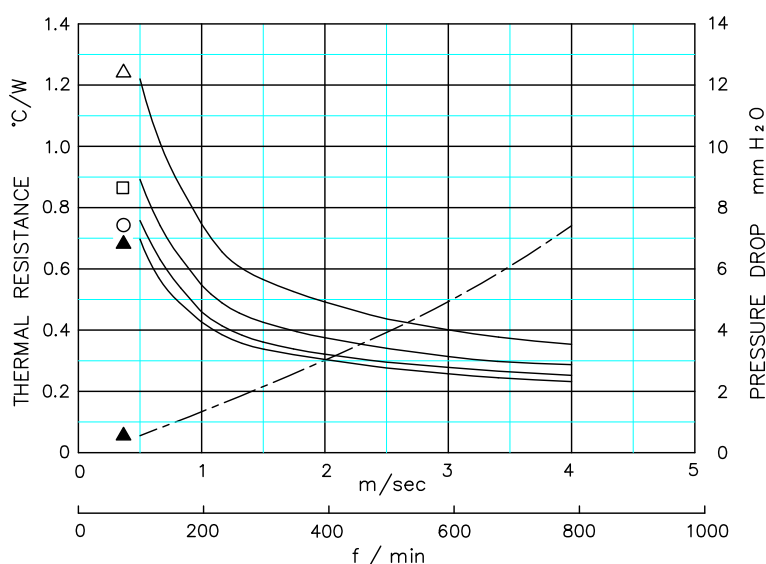
Low Pressure Drop and
Low Thermal Resistance Heat Sink
with attachment holes

UB90S



MODEL	HEIGHT [h]	WEIGHT (grams)
UB90S-15B	15	164.2
UB90S-20B	20	184.7
UB90S-25B	25	205.2
UB90S-30B	30	225.7

MATERIAL : A 6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm



- △ UB90S-15B
- UB90S-20B
- UB90S-25B
- ▲ UB90S-30B

● DUCTED CONDITION
DUMMY HEATER SIZE: 25 SQ
THERMAL RESISTANCE _____
PRESURE DROP _____

AIR VELOCITY: DUCTED CONDITION

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

Alpha Company Ltd.

256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
PHONE +81(55)966 0789
FAX +81(55)966 9192
E mail : alpha@micforg.co.jp
URL : <http://www.micforg.co.jp>

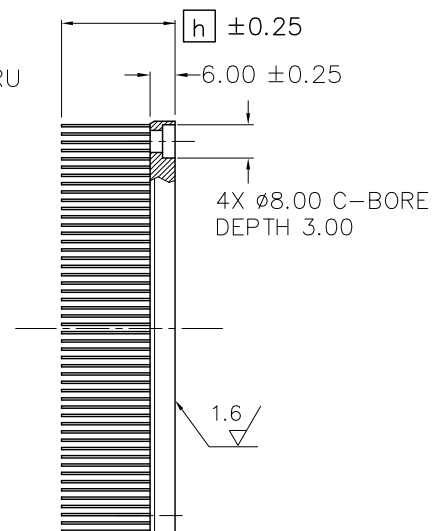
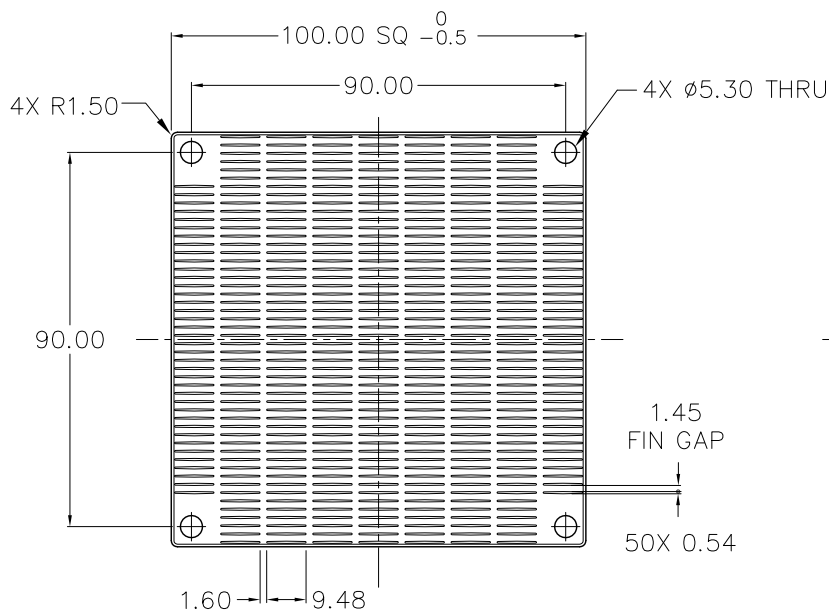
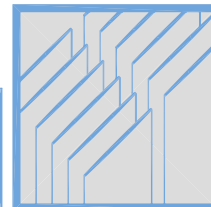
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

473 Sapena Ct. #12 Santa Clara, CA 95054 USA
PHONE +1(408)567-8082
FAX +1(408)567-8053
E mail : sales@alphanovatech.com
URL : <http://www.alphanovatech.com>

ALPHA

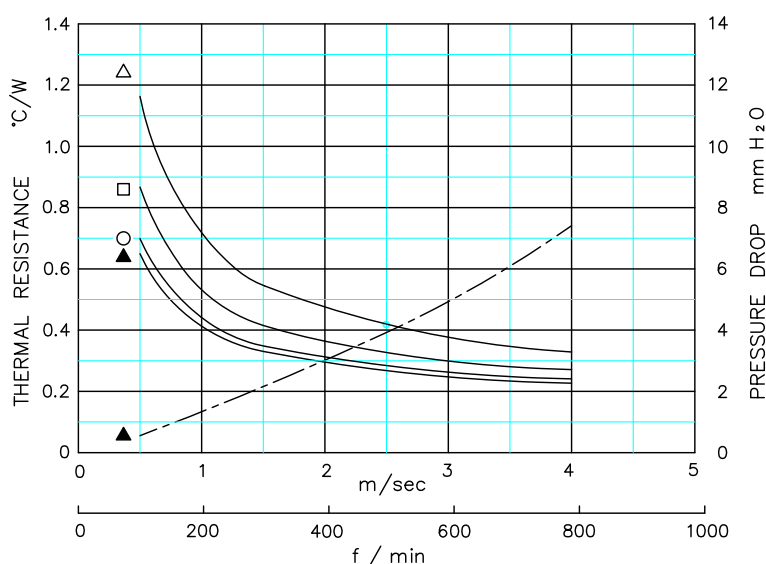
Low Pressure Drop and
Low Thermal Resistance Heat Sink
with attachment holes

UB100S



MODEL	HEIGHT [h]	WEIGHT (grams)
UB100S-15B	15	204.0
UB100S-20B	20	229.7
UB100S-25B	25	255.4
UB100S-30B	30	281.0

MATERIAL : A 6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm



AIR VELOCITY: DUCTED CONDITION

- △ UB100S-15B
- UB100S-20B
- UB100S-25B
- ▲ UB100S-30B

● DUCTED CONDITION
DUMMY HEATER SIZE: 25 SQ
THERMAL RESISTANCE _____
PRESSURE DROP _____

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

Alpha Company Ltd.

256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
PHONE +81(55)966 0789
FAX +81(55)966 9192
E mail : alpha@micforg.co.jp
URL : <http://www.micforg.co.jp>

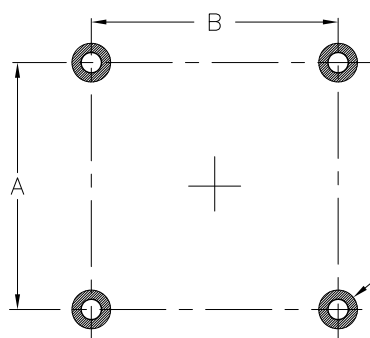
Alpha Novatech, Inc. - a subsidiary of Alpha Company.

473 Sapena Ct. #12 Santa Clara, CA 95054 USA
PHONE +1(408)567-8082
FAX +1(408)567-8053
E mail : sales@alphanovatech.com
URL : <http://www.alphanovatech.com>

REF



● BOARD KEEPOUT PATTERNS

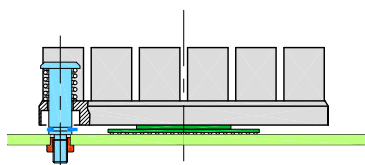


LPD80S AND UB80S	70.0	70.0
LPD90S AND UB90S	80.0	80.0
LPD100S AND UB100S	90.0	90.0
MODEL	A	B

ø8.0 KEEP-OUT AREA
NO COMPONENT PLACEMENT

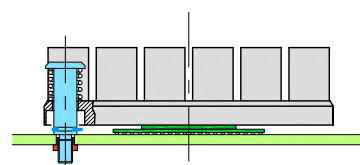
● INSTALLATION

USE PEM SMTSO-M3-**



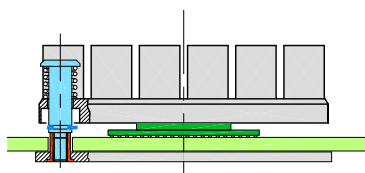
REQUIRES ø4.22 THRU HOLES IN BOARD.
PEM NUTS NEED THE SOLDERING.

USE MAC8 TH-1.6-**-M3



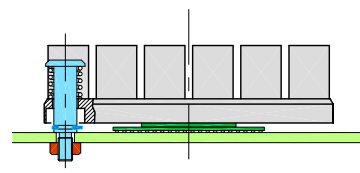
REQUIRES ø3.70 THRU HOLES IN BOARD.
MAC8 THREAD INSERT NEED THE SOLDERING.
RECOMMENDED P.C.B THICKNESS
MIN 1.6mm ~ MAX 3.7mm

USE ALPHA STANDARD BACKING PLATE



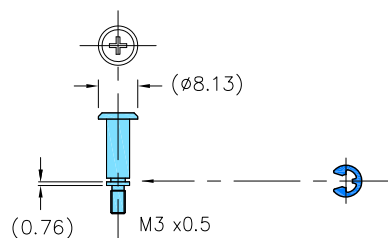
REQUIRES ø4.80 THRU HOLES IN BOARD.

USE HEX NUTS M3x0.5



REQUIRES ø3.30 THRU HOLES IN BOARD.

SHOULDER-SCREW / RETAINING RING E-3.0



REFER TO THE DRAWING FOR DETAIL SPECIFICATION.