

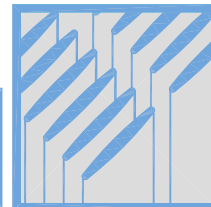
MD Series

Middle Density Heat Sink

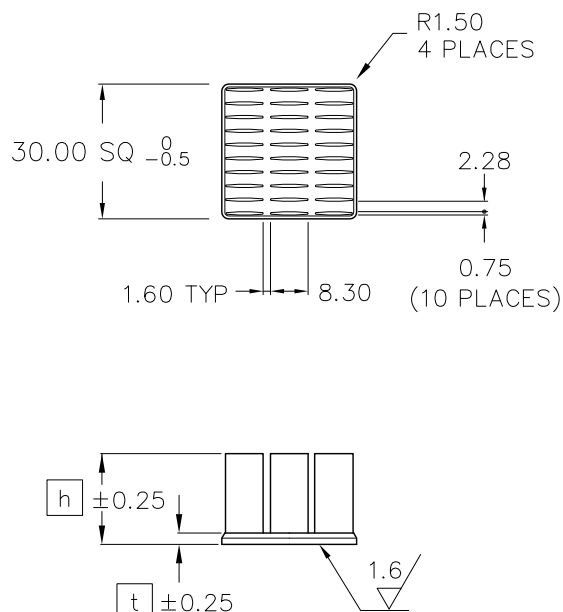
ALPHA

ALPHA

Middle Density Heat Sink

MD30

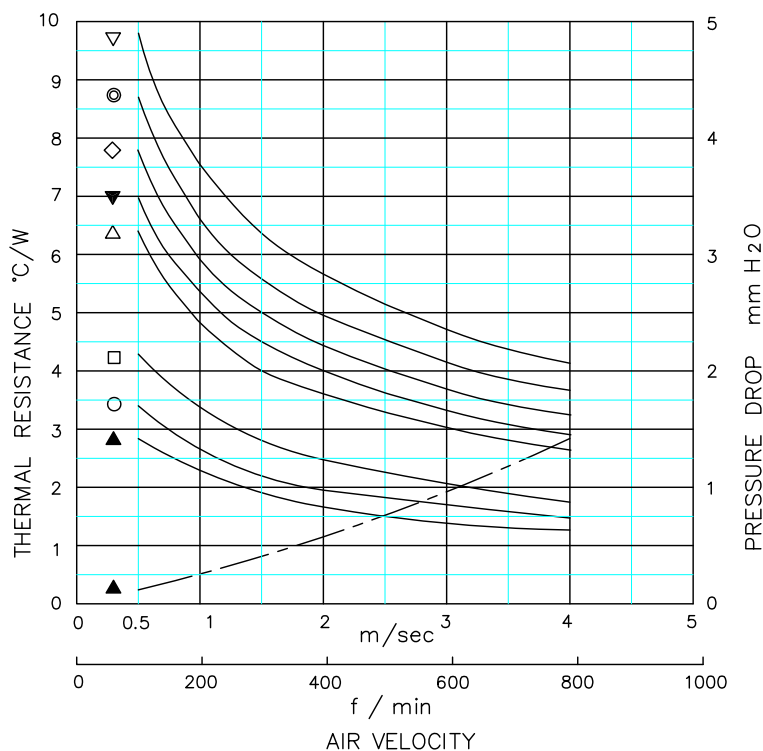
DIM



MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
MD30-6B	6	2.0	6.4
MD30-7B	7		6.8
MD30-8B	8		7.2
MD30-9B	9		7.6
MD30-10B	10		8.0
MD30-15B	15	2.5	11.2
MD30-20B	20		13.2
MD30-25B	25		15.2

MATERIAL : A 6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

DATA



- ▽ MD30-6B
- ⊙ MD30-7B
- ◇ MD30-8B
- ▼ MD30-9B
- △ MD30-10B
- MD30-15B
- MD30-20B
- ▲ MD30-25B

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

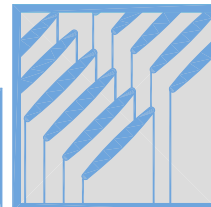
■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
 REFER TO TECHNICAL INFORMATION.

Alpha Company Ltd.

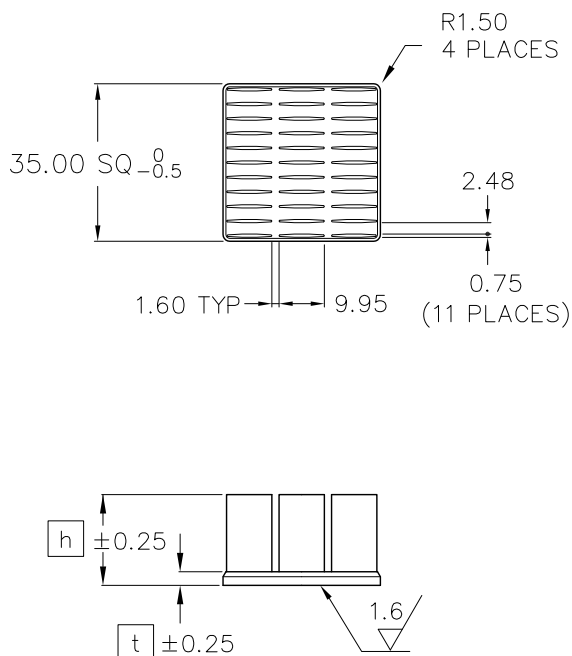
256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
 PHONE +81(55)966 0789
 FAX +81(55)966 9192
 E mail : alpha@micforg.co.jp
 URL : <http://www.micforg.co.jp>

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>



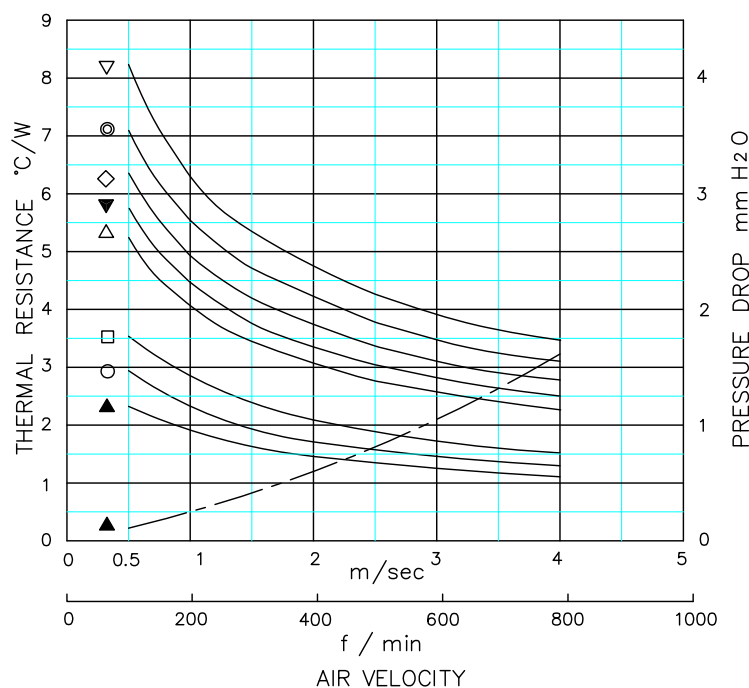
DIM



MODEL	HEIGHT h	THICKNESS t	WEIGHT (grams)
MD35-6B	6	2.0	8.7
MD35-7B	7		9.2
MD35-8B	8		9.7
MD35-9B	9		10.3
MD35-10B	10		10.8
MD35-15B	15	2.5	14.8
MD35-20B	20	3.0	18.8
MD35-25B	25		21.5

MATERIAL : A 6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



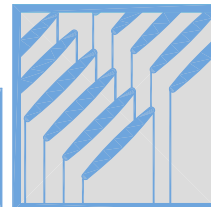
▽	MD35-6B
◎	MD35-7B
◇	MD35-8B
▼	MD35-9B
△	MD35-10B
□	MD35-15B
○	MD35-20B
▲	MD35-25B

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

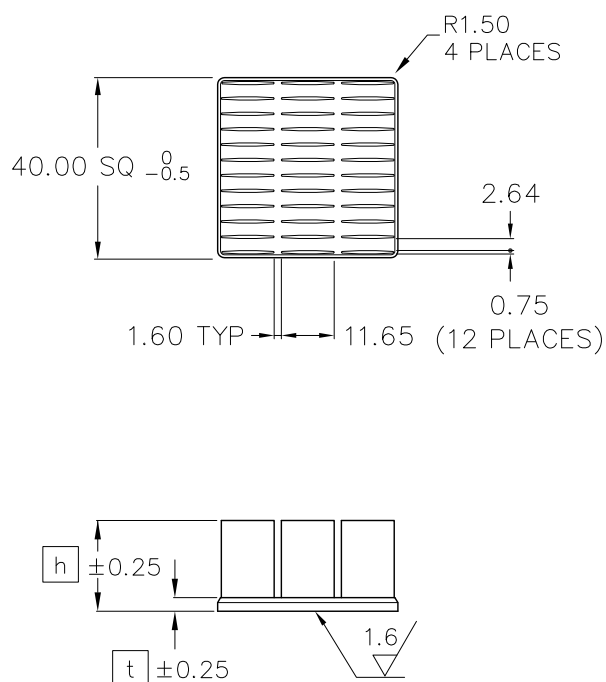
■ BASED ON ALPHA'S STANDARD TEST PROCEDURE.
REFER TO TECHNICAL INFORMATION.

ALPHA

Middle Density Heat Sink

MD40

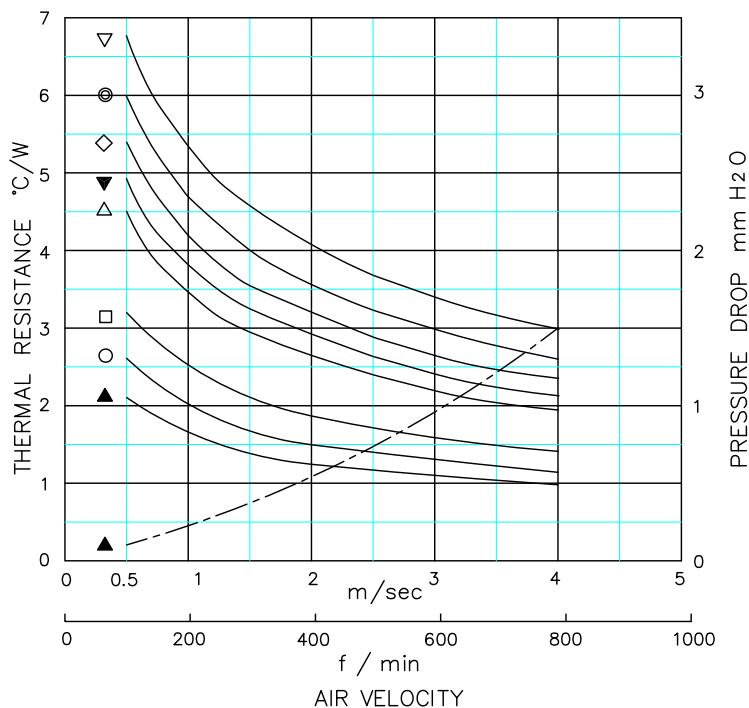
DIM



MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
MD40-6B	6	2.0	11.2
MD40-7B	7		11.9
MD40-8B	8		12.6
MD40-9B	9		13.3
MD40-10B	10		14.0
MD40-15B	15	2.5	19.7
MD40-20B	20		25.0
MD40-25B	25		28.5

MATERIAL : A 6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

DATA



- ▽ MD40-6B
- ⊙ MD40-7B
- ◇ MD40-8B
- ▼ MD40-9B
- △ MD40-10B
- MD40-15B
- MD40-20B
- ▲ MD40-25B

● 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.

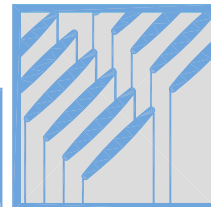
256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
 PHONE +81(55)966 0789
 FAX +81(55)966 9192
 E mail : alpha@micforg.co.jp
 URL : <http://www.micforg.co.jp>

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

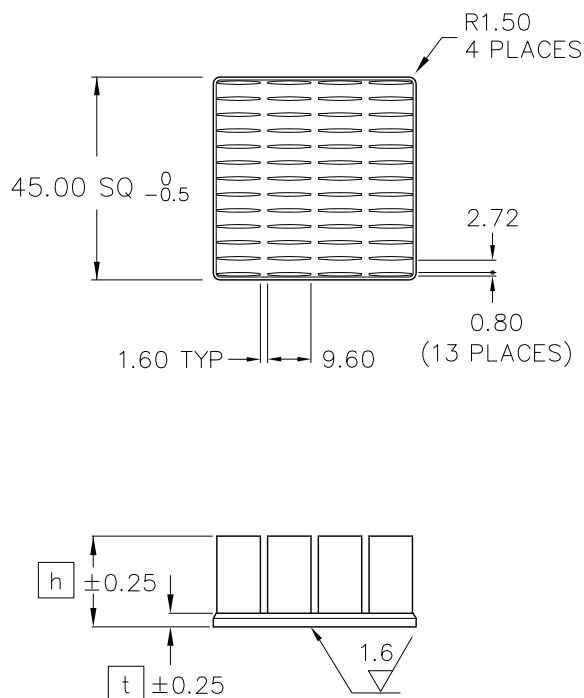
473 Sapena Ct. #12 Santa Clara, CA 95054 USA
 PHONE +1(408)567-8082
 FAX +1(408)567-8053
 E mail : sales@alphanovatech.com
 URL : <http://www.alphanovatech.com>

ALPHA

Middle Density Heat Sink

MD45

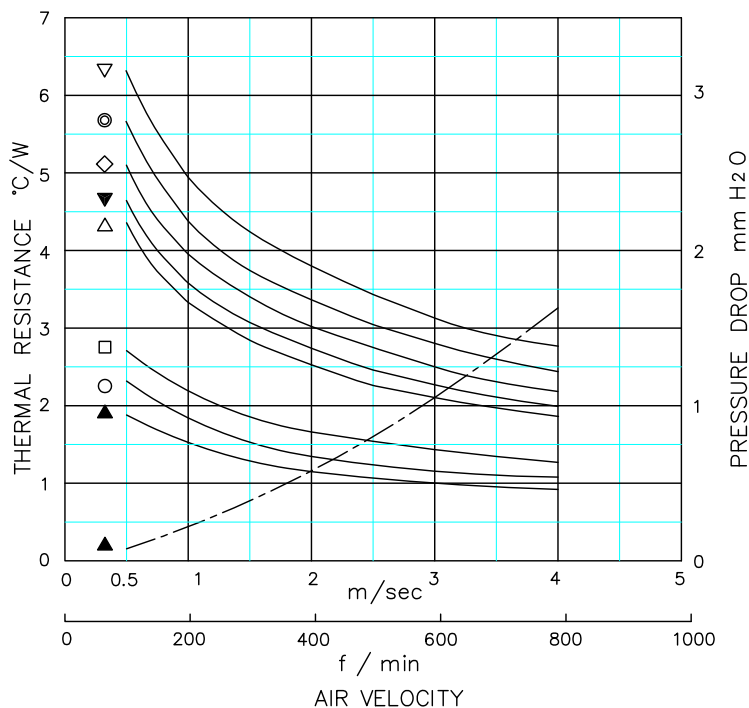
DIM



MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
MD45-6B	6	2.5	16.3
MD45-7B	7		17.1
MD45-8B	8		18.0
MD45-9B	9	3.0	18.8
MD45-10B	10		22.3
MD45-15B	15		26.4
MD45-20B	20		30.4
MD45-25B	25		34.4

MATERIAL : A 6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

DATA



▽ MD45-6B
 ⊙ MD45-7B
 ◇ MD45-8B
 ▼ MD45-9B
 △ MD45-10B
 □ MD45-15B
 ○ MD45-20B
 ▲ MD45-25B

● 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.

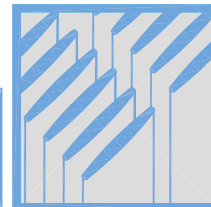
256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
 PHONE +81(55)966 0789
 FAX +81(55)966 9192
 E mail : alpha@micforg.co.jp
 URL : <http://www.micforg.co.jp>

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

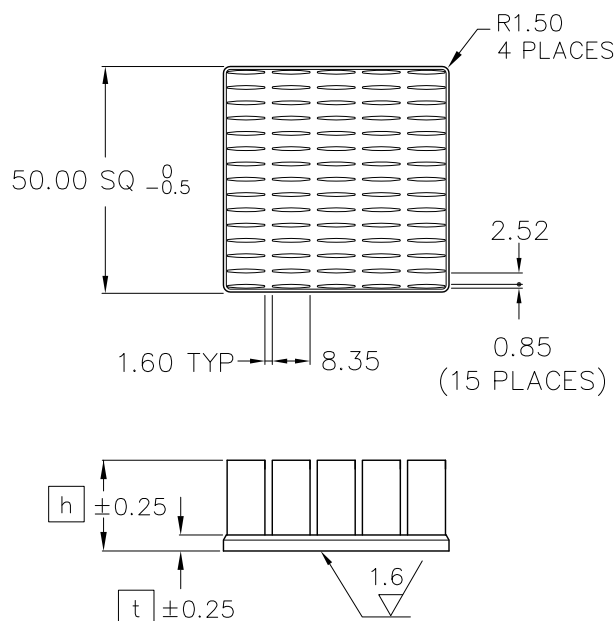
473 Sapena Ct. #12 Santa Clara, CA 95054 USA
 PHONE +1(408)567-8082
 FAX +1(408)567-8053
 E mail : sales@alphanovatech.com
 URL : <http://www.alphanovatech.com>

ALPHA

Middle Density Heat Sink

MD50

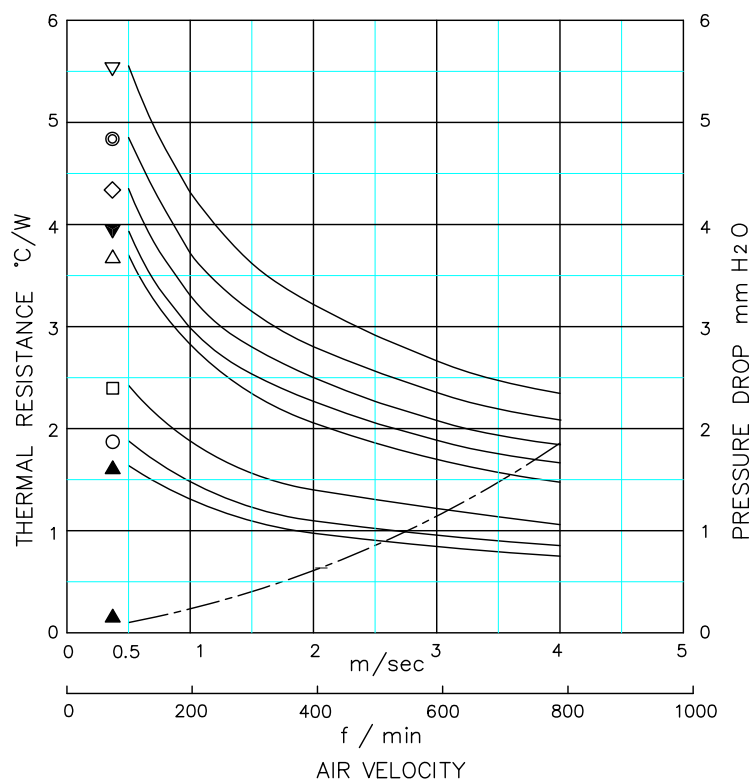
DIM



MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
MD50-6B	6	2.5	20.6
MD50-7B	7		21.7
MD50-8B	8		22.8
MD50-9B	9		23.9
MD50-10B	10	3.5	30.7
MD50-15B	15		36.0
MD50-20B	20		41.3
MD50-25B	25		46.6

MATERIAL : A 6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

DATA



▽ MD50-6B
 ⊙ MD50-7B
 ◇ MD50-8B
 ▼ MD50-9B
 △ MD50-10B
 □ MD50-15B
 ○ MD50-20B
 ▲ MD50-25B

● 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.

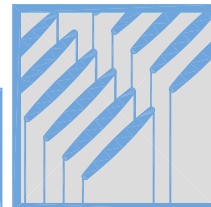
256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
 PHONE +81(55)966 0789
 FAX +81(55)966 9192
 E mail : alpha@micforg.co.jp
 URL : <http://www.micforg.co.jp>

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

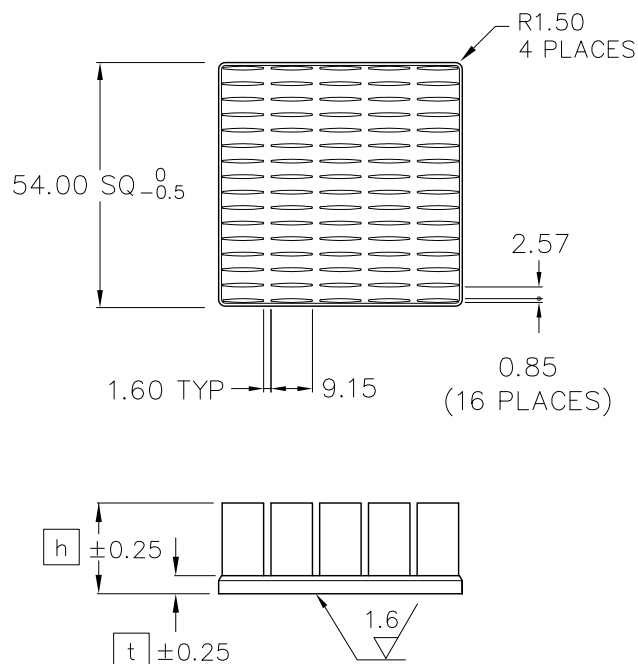
473 Sapena Ct. #12 Santa Clara, CA 95054 USA
 PHONE +1(408)567-8082
 FAX +1(408)567-8053
 E mail : sales@alphanovatech.com
 URL : <http://www.alphanovatech.com>

ALPHA

Middle Density Heat Sink

MD54

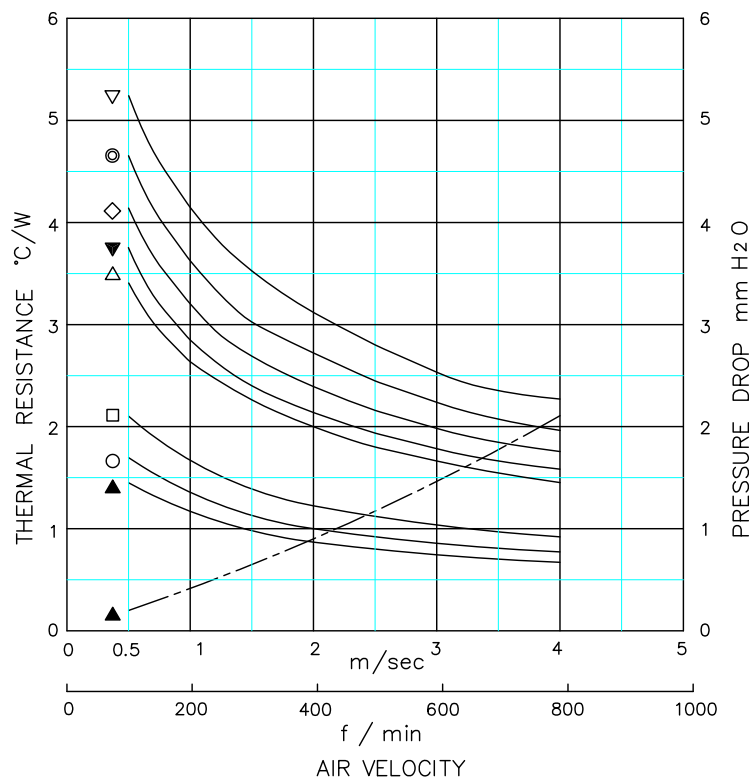
DIM



MODEL	HEIGHT [h]	THICKNESS [t]	WEIGHT (grams)
MD54-6B	6	3	26.9
MD54-7B	7		28.2
MD54-8B	8		29.5
MD54-9B	9		30.8
MD54-10B	10	4	39.3
MD54-15B	15		45.6
MD54-20B	20		51.9
MD54-25B	25		58.2

MATERIAL : A 6063
 FINISH : BLACK ANODIZE
 DIMENSIONS : mm

DATA



▽ MD54-6B
 ⊙ MD54-7B
 ◇ MD54-8B
 ▼ MD54-9B
 △ MD54-10B
 □ MD54-15B
 ○ MD54-20B
 ▲ MD54-25B

● 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.

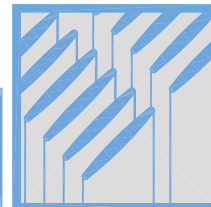
256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
 PHONE +81(55)966 0789
 FAX +81(55)966 9192
 E mail : alpha@micforg.co.jp
 URL : <http://www.micforg.co.jp>

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

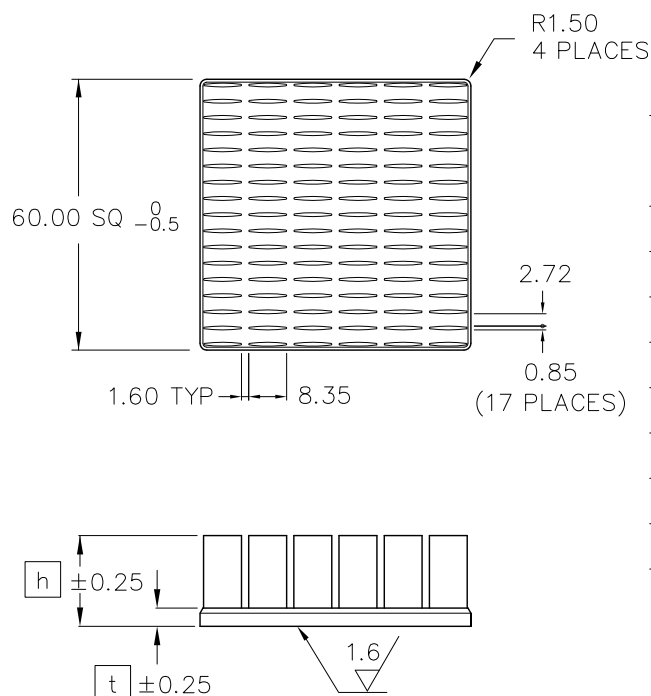
473 Sapena Ct. #12 Santa Clara, CA 95054 USA
 PHONE +1(408)567-8082
 FAX +1(408)567-8053
 E mail : sales@alphanovatech.com
 URL : <http://www.alphanovatech.com>

ALPHA

Middle Density Heat Sink

MD60

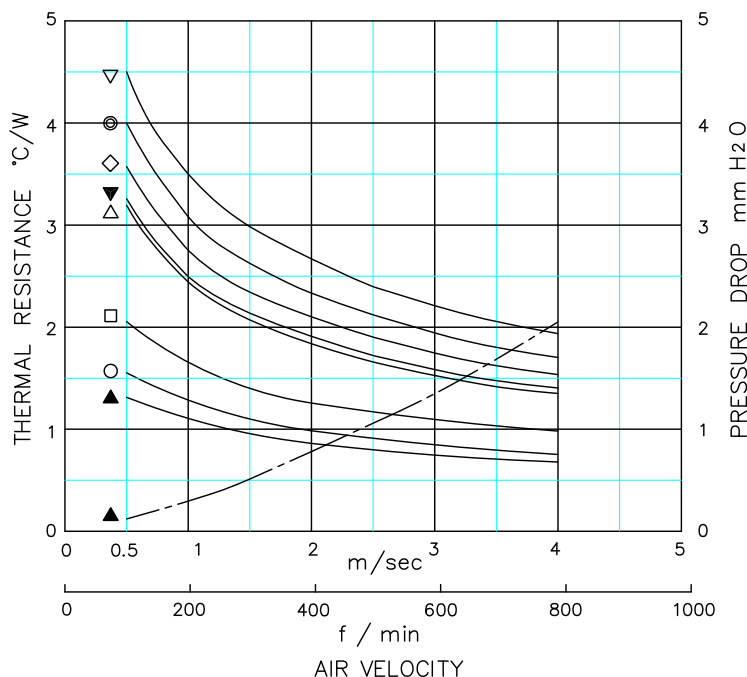
DIM



MODEL	HEIGHT h	THICKNESS t	WEIGHT (grams)
MD60-6B	6	3	33.1
MD60-7B	7		34.9
MD60-8B	8		36.7
MD60-9B	9		38.6
MD60-10B	10	4	47.3
MD60-15B	15		54.7
MD60-20B	20		62.1
MD60-25B	25		69.5

MATERIAL : A 6063
FINISH : BLACK ANODIZE
DIMENSIONS : mm

DATA



- ▽ MD60-6B
- MD60-7B
- ◇ MD60-8B
- ▼ MD60-9B
- △ MD60-10B
- MD60-15B
- MD60-20B
- ▲ MD60-25B

● 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.

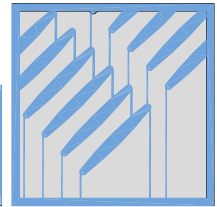
256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
PHONE +81(55)966 0789
FAX +81(55)966 9192
E mail : alpha@micforg.co.jp
URL : <http://www.micforg.co.jp>

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

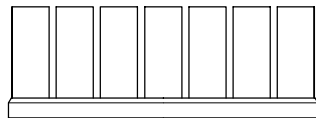
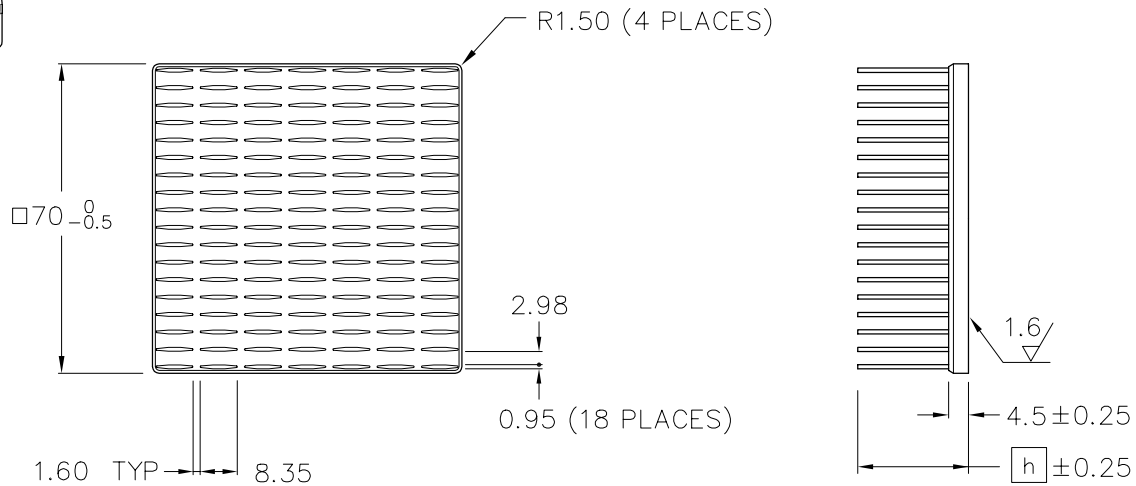
473 Sapena Ct. #12 Santa Clara, CA 95054 USA
PHONE +1(408)567-8082
FAX +1(408)567-8053
E mail : sales@alphanovatech.com
URL : <http://www.alphanovatech.com>

ALPHA

Middle Density Heat Sink

MD70

DIM

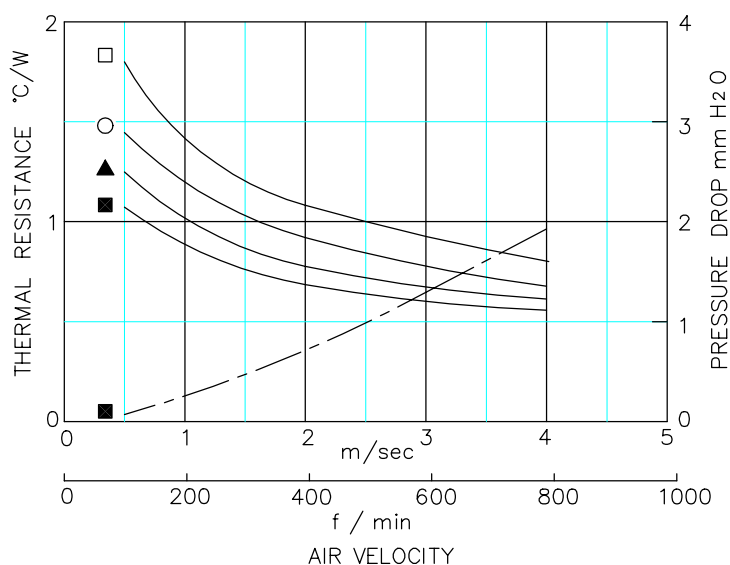


HEAT SINK
MATERIAL : A 6063
FINISH : BLACK ANODIZE

MODEL	HEIGHT $\square h$	WEIGHT (grams)
MD70-15B	15	81.8
MD70-20B	20	91.0
MD70-25B	25	100.2
MD70-30B	30	109.4

Dimensions : mm

DATA



● Thermal Resistance (Ducted)
(Solid Line)

● Pressure Drop
(Center Line)

$\square$ MD70-15B

$\circ$ MD70-20B

$\blacktriangle$ MD70-25B

$\blacksquare$ MD70-30B

■ Based on Alpha's Standard Test Procedure. (Refer to page marked Technical Information.)
Dummy Heater Size : $\square 12.7(\text{mm})$

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.jpURL : <http://www.micforg.co.jp>

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

473 Sapena Ct. #12 Santa Clara, CA 95054 USA

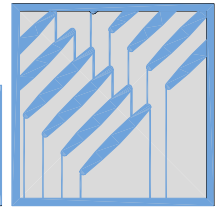
PHONE +1(408)567-8082

FAX +1(408)567-8053

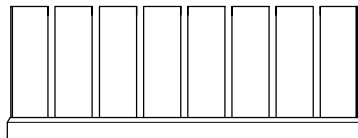
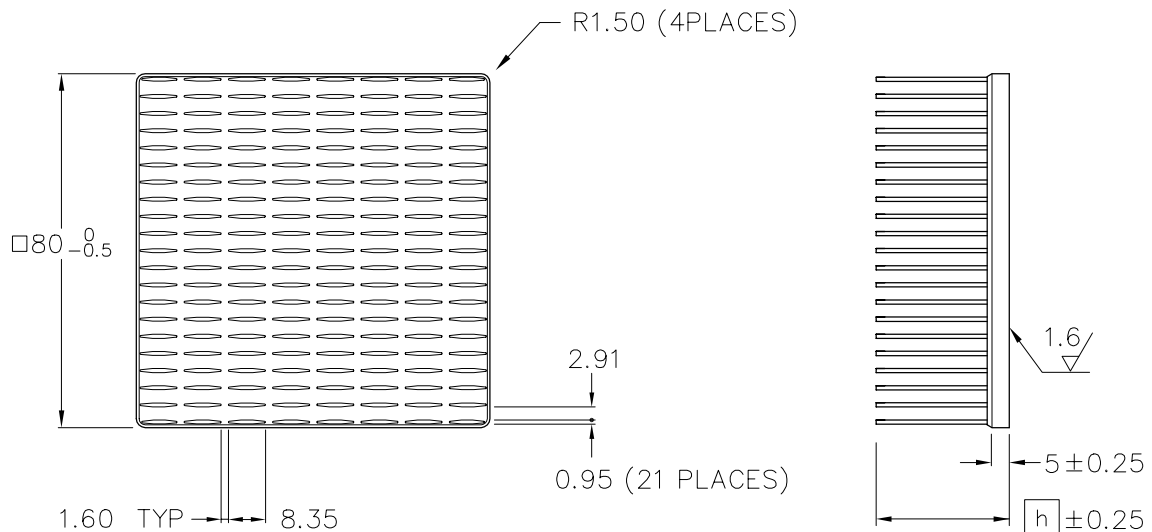
E mail : sales@alphanovatech.comURL : <http://www.alphanovatech.com>

ALPHA

Middle Density Heat Sink

MD 80

DIM

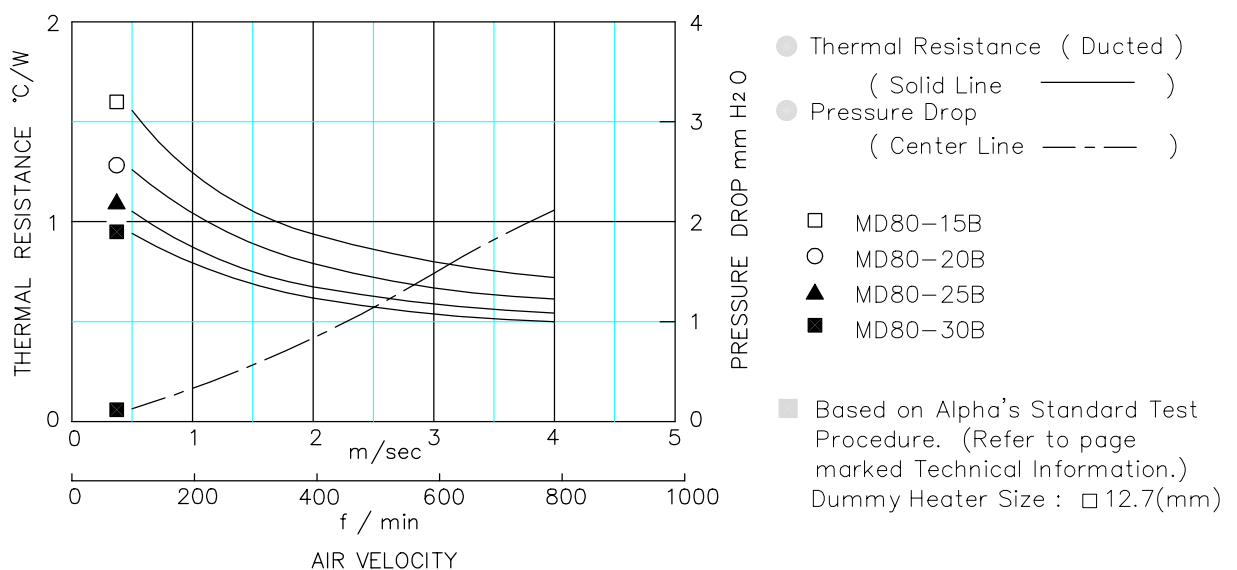


MODEL	HEIGHT h	WEIGHT (grams)
MD80-15B	15	114.2
MD80-20B	20	127.3
MD80-25B	25	140.4
MD80-30B	30	153.5

HEAT SINK
 MATERIAL : A 6063
 FINISH : BLACK ANODIZE

Dimensions : mm

DATA



Alpha Company Ltd.

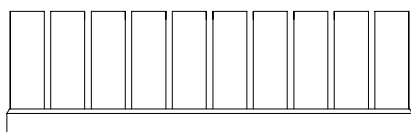
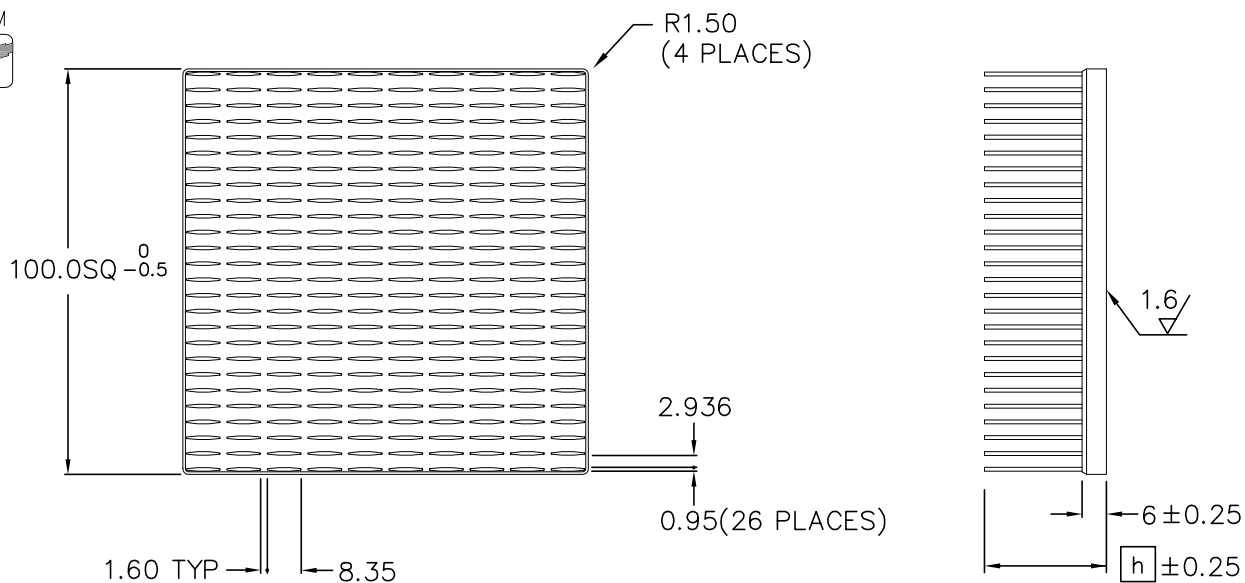
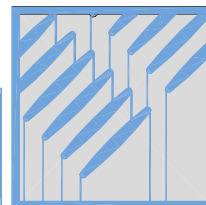
256-1 UEDA, NUMAZU-CITY SHIZUOKA-PREF., JAPAN
 PHONE +81(55)966 0789
 FAX +81(55)966 9192
 E mail : alpha@micforg.co.jp
 URL : <http://www.micforg.co.jp>

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

Middle Density Heat Sink

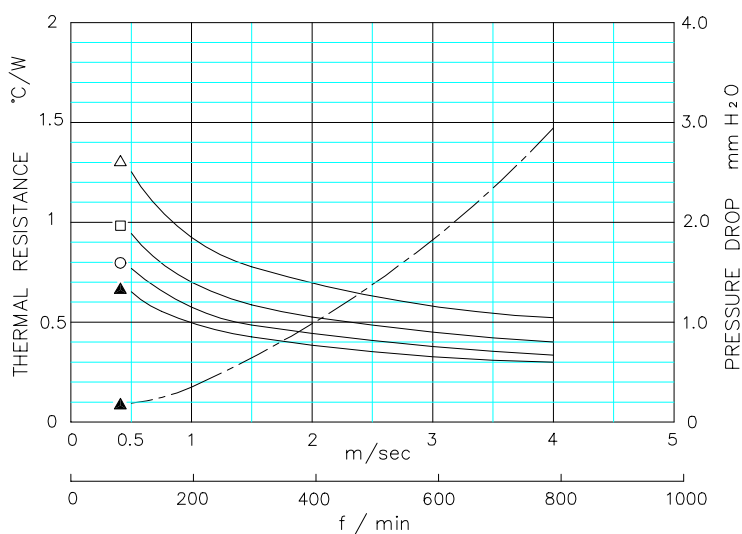
MD100

HEAT SINK
 MATERIAL : A 6063
 FINISH : BLACK ANODIZE

MODEL	HEIGHT [h]	WEIGHT (grams)
MD100-15B	15	196.5
MD100-20B	20	216.8
MD100-25B	25	237.1
MD100-30B	30	257.4

Dimensions : mm

DATA



- Thermal Resistance (Ducted)
(Solid Line —)
- Pressure Drop
(Center Line - - -)

- △ MD100-15B
- MD100-20B
- MD100-25B
- ▲ MD100-30B

■ Based on Alpha's Standard Test Procedure. (Refer to page marked Technical Information.)
 Dummy Heater Size : □ 25.4(mm)

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