MHP-2550A400A

[General Specification]

Item		Description
Part Number		MHP-2550A400A
Material of Container		Aluminium 1050
Wick Structure		Groove
Working Fluid		Acetone
Dimension	Thickness	2.5 mm
	Width	50.0 mm
	Length	400.0 mm
Weight		26.0 g (Average)
Qmax	Horizontal	75.0 W (at 50°C)
	Vertical	270.0 W (at 50°C)
Typical Thermal Resistance		<0.2^{o}C / W (Average)
Operating Inclination, Ø		0 ~ 90°
Leak Temperature Criterion		-40~100°C

[Scope]

This specification details the requirements and applications for 2.5 mm x 50.0mm x 400.0mm.

[Dimensions]

The dimensional attributes of this shall conform to the following figure.
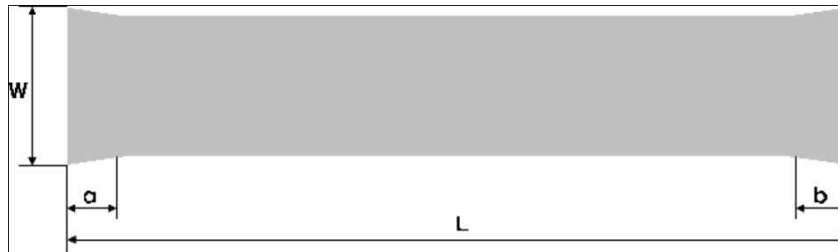
Thickness (t)	Width (W)	Length (L)	Ineffective Length (a)	Ineffective Length (b)
2.5 mm	50.0 mm	400.0 mm	2.5 mm	2.5 mm

[Material]

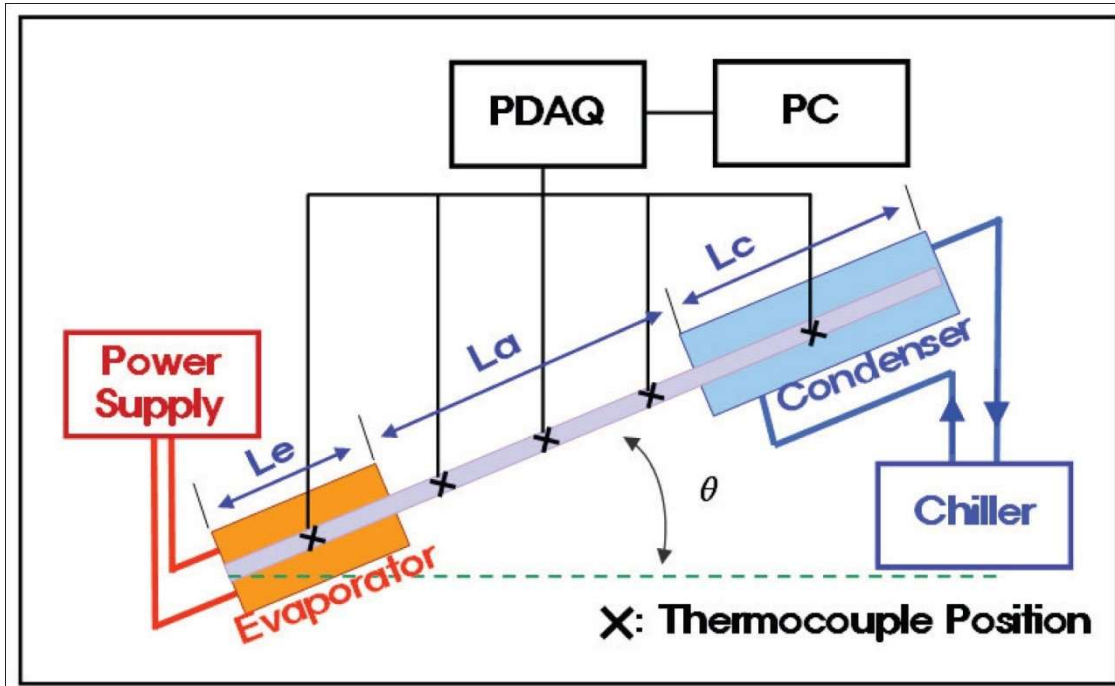| Container	Aluminium 1050
Working Fluid	Acetone
Surface Treatment	None

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Telephone: +44(0) 1493 668622   Fax:
Email: sales@amecthermasol.co.uk   Website: www.amecthermasol.co.uk
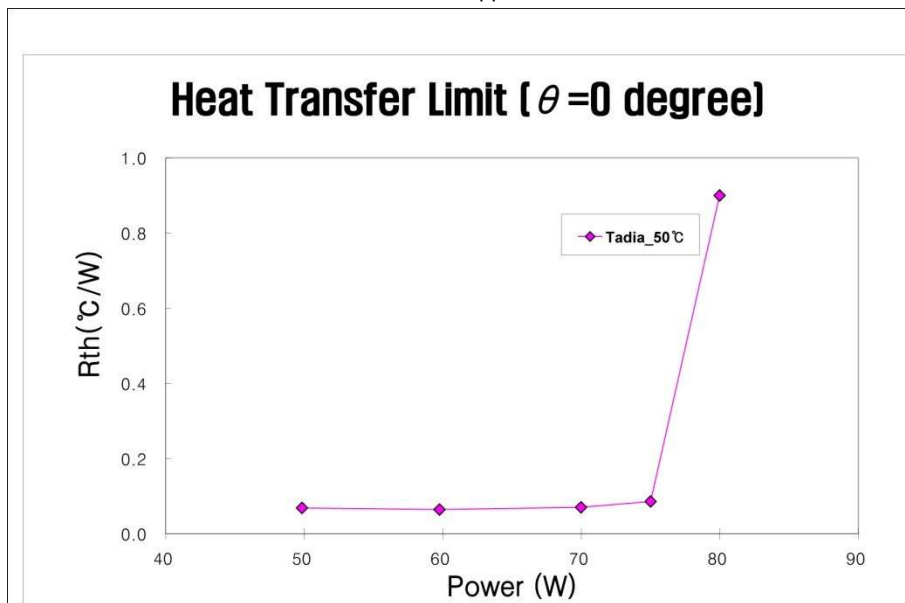
MHP-2550A150A

Qmax Test Apparatus

Fig. 3   Maximum Heat Transfer Rate at Θ=0°, Tadia=50℃
(Le=30mm, La=70mm, Lc=50mm)

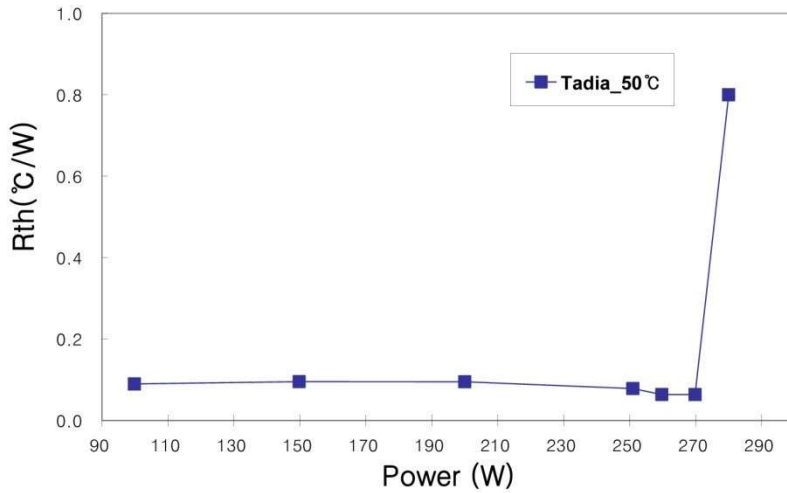# MHP-2550A150A

Heat Transfer Limit (θ =90 degree)

Fig. 4   Maximum Heat Transfer Rate at $\Theta=90°$, Tadia=50℃
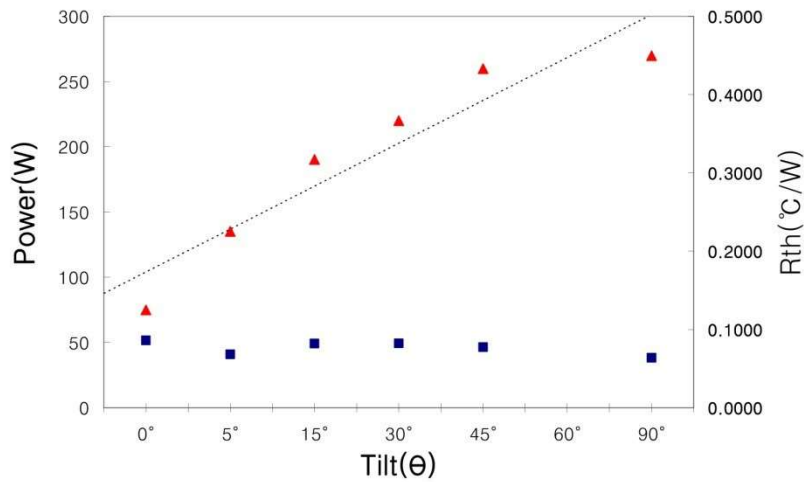(Le=30mm, La=70mm, Lc=50mm)

Qmax v.s. Tilt

Fig. 5   Maximum Heat Transfer Rate vs. Inclination at Tadia=50℃
(Le=30mm, La=70mm, Lc=50mm)

[High Temperature Leak Test]

Every manufactured S sealed with a mechanical pinch system. The mechanical pinch of container results in a cold weld seal. The average leak temperature is about 170℃.

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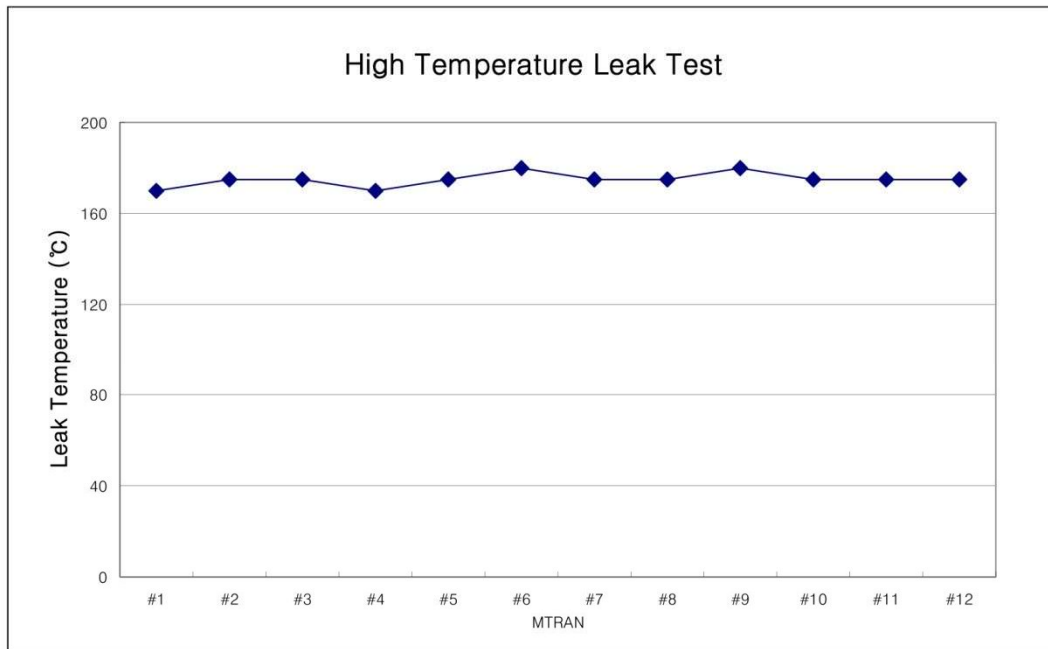Email: sales@amecthermasol.co.uk   Website: www.amecthermasol.co.uk

Fig. 6 Leak Test at High Temperature

[Thermal Response Test]

Every manufactured must pass the thermal response test to ensure its operation and Vacuum and leakage check. The experimental test bench is schematically shown in Fig.6. Water bath temperature, Tw is set at 50°C and the temperature of other end, Tt is measured immediately after it is placed vertically into the water bath. The criterion for acceptance is 5°C (Tw – Tt).
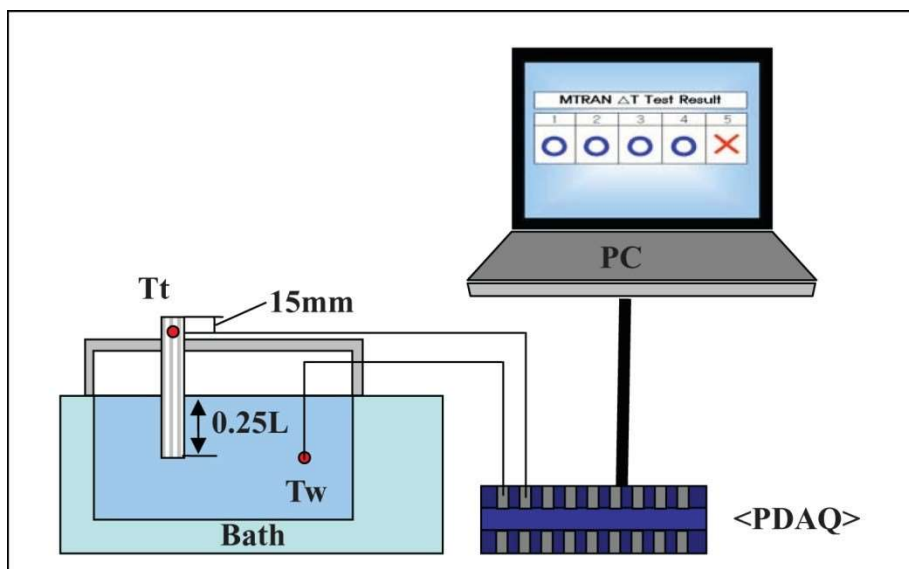

Fig. 7 Thermal Response Test Apparatus

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