

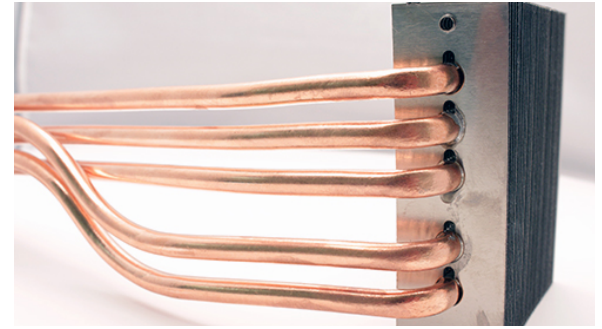


Heat Pipes

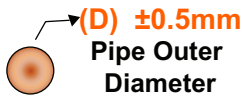
ATS' high performance **Round and Flat Heat Pipes** are used to transfer heat with minimal temperature difference or spread the heat across a surface. ATS' heat pipes are low profile and easily attach to a heat sink.

FEATURES & BENEFITS

- » Tube material: copper
- » Wick structures: grooved or sintered copper powder
- » High thermal conductivity
- » Light weight
- » Fast thermal response

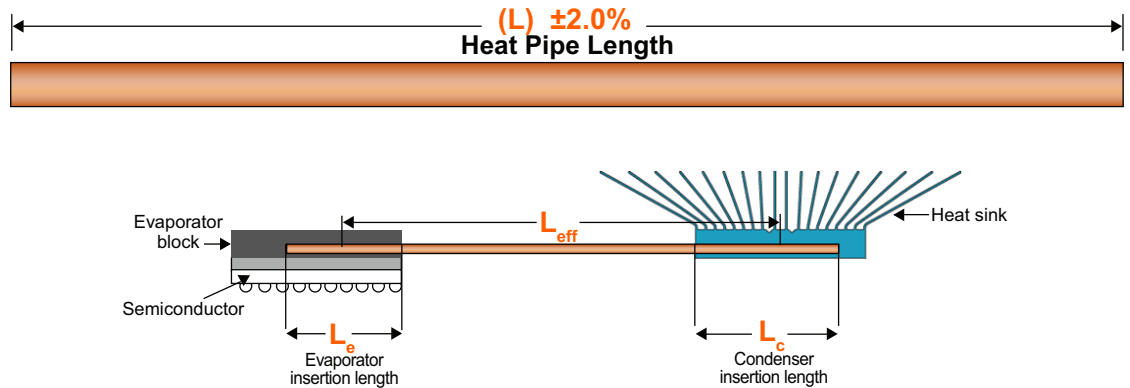


ROUND HEAT PIPES



$$Q_{max} = \frac{Q_t}{L_{eff}} \times 1000$$

$$L_{eff} = L - (L_e + L_c) / 2$$

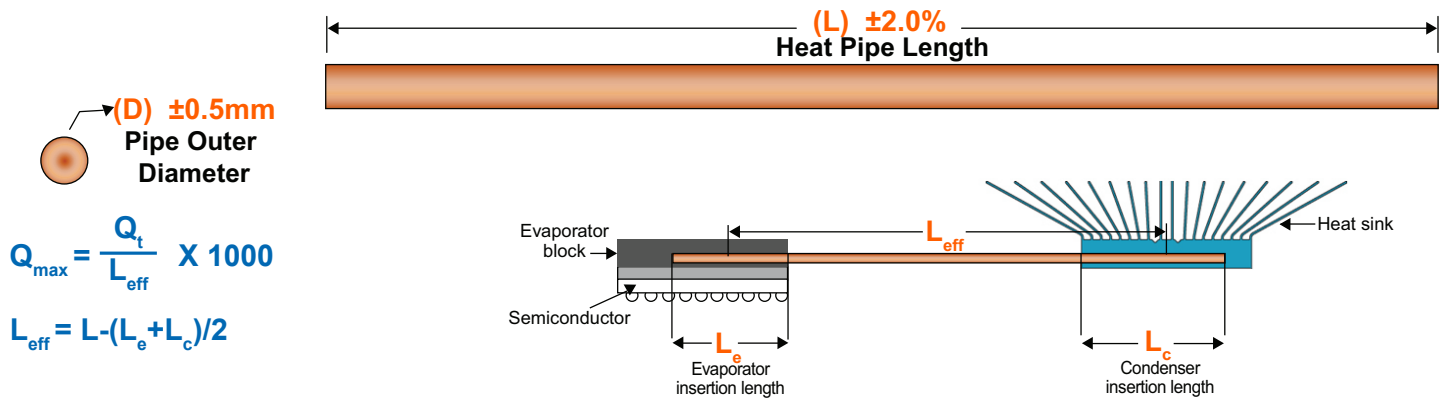


PRODUCT SPECIFICATIONS

L=Length (mm); D=Diameter (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR=Temperature Range (°C)

| Part Number | L | D | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{max} (W) | L_{eff} (mm) | Q_{max} (W) | L_{eff} (mm) | Q_{max} (W) |
|-----------------------|-----|-----|----|----------------------------|--------|----------|----------------|---------------|----------------|---------------|----------------|---------------|
| ATS-HP-D4L200G30W-001 | 200 | 4.0 | G | Distilled H ₂ O | 30-120 | 4.1 | 100 | 41 | 125 | 32 | 150 | 27.0 |
| ATS-HP-D4L300G20W-002 | 300 | 4.0 | G | Distilled H ₂ O | 30-120 | 4.1 | 150 | 27 | 200 | 20 | 250 | 16.0 |
| ATS-HP-D5L200G40W-003 | 200 | 5.0 | G | Distilled H ₂ O | 30-120 | 4.7 | 100 | 47 | 125 | 38 | 150 | 32.0 |
| ATS-HP-D5L300G25W-004 | 300 | 5.0 | G | Distilled H ₂ O | 30-120 | 4.5 | 150 | 30 | 200 | 23 | 250 | 18.0 |
| ATS-HP-D6L200G45W-005 | 200 | 6.0 | G | Distilled H ₂ O | 30-120 | 6.4 | 100 | 64 | 125 | 51 | 150 | 42.0 |
| ATS-HP-D6L300G30W-006 | 300 | 6.0 | G | Distilled H ₂ O | 30-120 | 7.9 | 150 | 53 | 200 | 39 | 250 | 32.0 |
| ATS-HP-D5L200S40W-007 | 200 | 5.0 | S | Distilled H ₂ O | 30-120 | 4.1 | 100 | 41 | 125 | 32 | 150 | 27.0 |
| ATS-HP-D5L300S25W-008 | 300 | 5.0 | S | Distilled H ₂ O | 30-120 | 5.6 | 150 | 38 | 200 | 28 | 250 | 23.0 |
| ATS-HP-D6L200S45W-009 | 200 | 6.0 | S | Distilled H ₂ O | 30-120 | 2.0 | 100 | 20 | 125 | 16 | 150 | 14.0 |
| ATS-HP-D6L300S30W-010 | 300 | 6.0 | S | Distilled H ₂ O | 30-120 | 3.2 | 150 | 21 | 200 | 16 | 250 | 13.0 |
| ATS-HP-D8L300S55W-011 | 300 | 8.0 | S | Distilled H ₂ O | 30-120 | 7.2 | 150 | 48 | 200 | 36 | 250 | 29.0 |

Round Heat Pipes

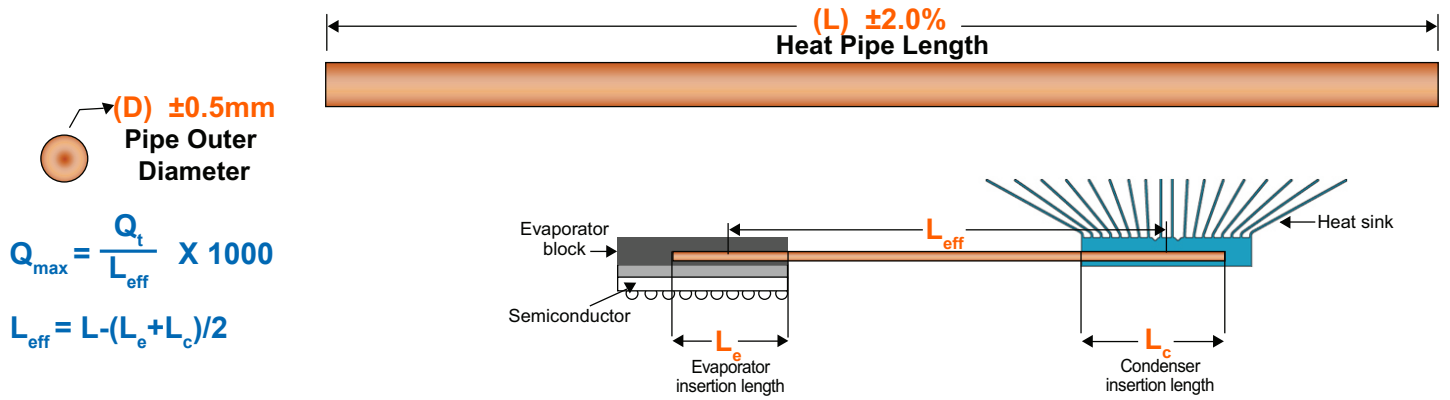


PRODUCT SPECIFICATIONS

L=Length (mm); **D**=Diameter (mm); **WT**=Wick Type (S=Sintered, G=Grooved); **WF**=Working Fluid; **TR**=Temperature Range (°C)

| Part Number | L | D | WT | WF | TR | QT (W•m) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) |
|------------------------|-----|---|----|----------------------------|--------|----------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| ATS-HP-D3L70S26W-111 | 70 | 3 | S | Distilled H ₂ O | 30-120 | 0.93 | 35 | 27 | 28 | 33 | 42 | 22 |
| ATS-HP-D3L100S18W-112 | 100 | 3 | S | Distilled H ₂ O | 30-120 | 0.94 | 50 | 19 | 40 | 23 | 60 | 16 |
| ATS-HP-D3L150S12W-113 | 150 | 3 | S | Distilled H ₂ O | 30-120 | 0.93 | 75 | 12 | 60 | 16 | 90 | 10 |
| ATS-HP-D3L200S9W-114 | 200 | 3 | S | Distilled H ₂ O | 30-120 | 0.94 | 100 | 9 | 80 | 12 | 120 | 8 |
| ATS-HP-D4L70S71W-115 | 70 | 4 | S | Distilled H ₂ O | 30-120 | 2.50 | 35 | 71 | 28 | 89 | 42 | 60 |
| ATS-HP-D4L100S50W-116 | 100 | 4 | S | Distilled H ₂ O | 30-120 | 2.50 | 50 | 50 | 40 | 63 | 60 | 42 |
| ATS-HP-D4L150S33W-117 | 150 | 4 | S | Distilled H ₂ O | 30-120 | 2.50 | 75 | 33 | 60 | 42 | 90 | 28 |
| ATS-HP-D4L200S25W-118 | 200 | 4 | S | Distilled H ₂ O | 30-120 | 2.50 | 100 | 25 | 80 | 31 | 120 | 21 |
| ATS-HP-D4L250S20W-119 | 250 | 4 | S | Distilled H ₂ O | 30-120 | 2.50 | 125 | 20 | 100 | 25 | 150 | 17 |
| ATS-HP-D5L70S115W-120 | 70 | 5 | S | Distilled H ₂ O | 30-120 | 4.05 | 35 | 116 | 28 | 145 | 42 | 96 |
| ATS-HP-D5L100S80W-121 | 100 | 5 | S | Distilled H ₂ O | 30-120 | 4.05 | 50 | 81 | 40 | 101 | 60 | 67 |
| ATS-HP-D5L250S32W-124 | 250 | 5 | S | Distilled H ₂ O | 30-120 | 4.05 | 125 | 32 | 100 | 40 | 150 | 27 |
| ATS-HP-D5L350S23W-126 | 350 | 5 | S | Distilled H ₂ O | 30-120 | 4.05 | 175 | 23 | 140 | 29 | 210 | 19 |
| ATS-HP-D6L70S153W-127 | 70 | 6 | S | Distilled H ₂ O | 30-120 | 5.38 | 35 | 154 | 28 | 192 | 42 | 128 |
| ATS-HP-D6L100S107W-128 | 100 | 6 | S | Distilled H ₂ O | 30-120 | 5.38 | 50 | 108 | 40 | 134 | 60 | 90 |
| ATS-HP-D6L150S71W-129 | 150 | 6 | S | Distilled H ₂ O | 30-120 | 5.38 | 75 | 72 | 60 | 90 | 90 | 60 |
| ATS-HP-D6L250S43W-131 | 250 | 6 | S | Distilled H ₂ O | 30-120 | 5.38 | 125 | 43 | 100 | 54 | 150 | 36 |
| ATS-HP-D6L350S30W-133 | 350 | 6 | S | Distilled H ₂ O | 30-120 | 5.38 | 175 | 31 | 140 | 38 | 210 | 26 |
| ATS-HP-D6L400S26W-134 | 400 | 6 | S | Distilled H ₂ O | 30-120 | 5.38 | 200 | 27 | 160 | 34 | 240 | 22 |
| ATS-HP-D7L70S185W-135 | 70 | 7 | S | Distilled H ₂ O | 30-120 | 6.49 | 35 | 185 | 28 | 232 | 42 | 154 |

Round Heat Pipes

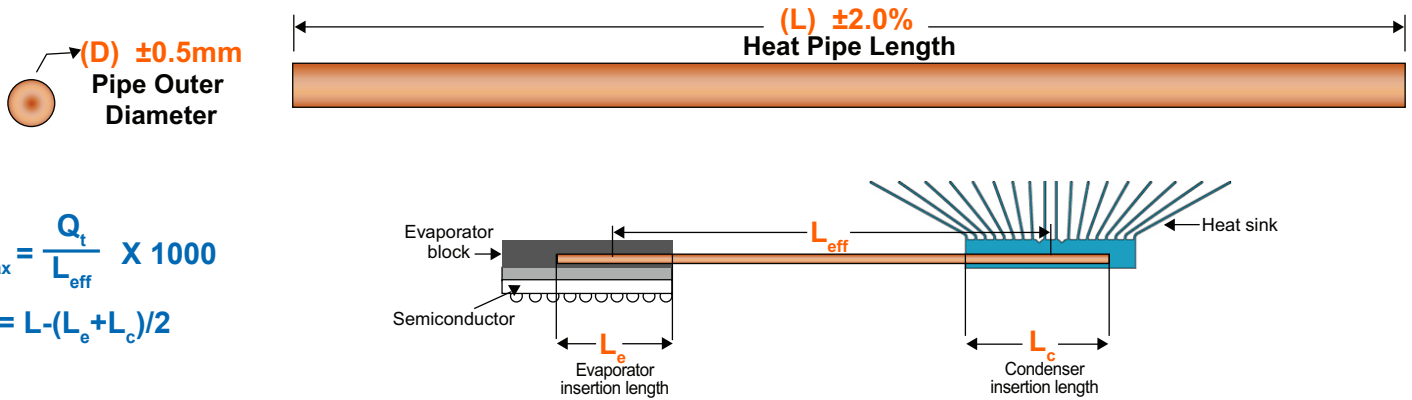


PRODUCT SPECIFICATIONS

L=Length (mm); **D**=Diameter (mm); **WT**=Wick Type (S=Sintered, G=Grooved); **WF**=Working Fluid; **TR**=Temperature Range (°C)

| Part Number | L | D | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) |
|--------------------------|-----|-----|----|----------------------------|--------|----------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| ATS-HP-D7L100S129W-136 | 100 | 7 | S | Distilled H ₂ O | 30-120 | 6.49 | 50 | 130 | 40 | 162 | 60 | 108 |
| ATS-HP-D7L150S86W-137 | 150 | 7 | S | Distilled H ₂ O | 30-120 | 6.49 | 75 | 87 | 60 | 108 | 90 | 72 |
| ATS-HP-D7L200S64W-138 | 200 | 7 | S | Distilled H ₂ O | 30-120 | 6.49 | 100 | 65 | 80 | 81 | 120 | 54 |
| ATS-HP-D7L250S51W-139 | 250 | 7 | S | Distilled H ₂ O | 30-120 | 6.49 | 125 | 52 | 100 | 65 | 150 | 43 |
| ATS-HP-D7L300S43W-140 | 300 | 7 | S | Distilled H ₂ O | 30-120 | 6.49 | 150 | 43 | 120 | 54 | 180 | 36 |
| ATS-HP-D7L350S37W-141 | 350 | 7 | S | Distilled H ₂ O | 30-120 | 6.49 | 175 | 37 | 140 | 46 | 210 | 31 |
| ATS-HP-D7L400S32W-142 | 400 | 7 | S | Distilled H ₂ O | 30-120 | 6.49 | 200 | 32 | 160 | 41 | 240 | 27 |
| ATS-HP-D7L450S28W-143 | 450 | 7 | S | Distilled H ₂ O | 30-120 | 6.49 | 225 | 29 | 180 | 36 | 270 | 24 |
| ATS-HP-D7L500S25W-144 | 500 | 7 | S | Distilled H ₂ O | 30-120 | 6.49 | 250 | 26 | 200 | 32 | 300 | 22 |
| ATS-HP-D8L70S222W-145 | 70 | 8 | S | Distilled H ₂ O | 30-120 | 7.79 | 35 | 223 | 28 | 278 | 42 | 185 |
| ATS-HP-D8L100S155W-146 | 100 | 8 | S | Distilled H ₂ O | 30-120 | 7.79 | 50 | 156 | 40 | 195 | 60 | 130 |
| ATS-HP-D8L150S103W-147 | 150 | 8 | S | Distilled H ₂ O | 30-120 | 7.79 | 75 | 104 | 60 | 130 | 90 | 87 |
| ATS-HP-D8L200S77W-148 | 200 | 8 | S | Distilled H ₂ O | 30-120 | 7.79 | 100 | 78 | 80 | 97 | 120 | 65 |
| ATS-HP-D8L250S62W-149 | 250 | 8 | S | Distilled H ₂ O | 30-120 | 7.79 | 125 | 62 | 100 | 78 | 150 | 52 |
| ATS-HP-D8L300S51W-150 | 300 | 8 | S | Distilled H ₂ O | 30-120 | 7.79 | 150 | 52 | 120 | 65 | 180 | 43 |
| ATS-HP-D8L350S44W-151 | 350 | 8 | S | Distilled H ₂ O | 30-120 | 7.79 | 175 | 45 | 140 | 56 | 210 | 37 |
| ATS-HP-D8L400S38W-152 | 400 | 8 | S | Distilled H ₂ O | 30-120 | 7.79 | 200 | 39 | 160 | 49 | 240 | 32 |
| ATS-HP-D8L450S34W-153 | 450 | 8 | S | Distilled H ₂ O | 30-120 | 7.79 | 225 | 35 | 180 | 43 | 270 | 29 |
| ATS-HP-D8L500S31W-154 | 500 | 8 | S | Distilled H ₂ O | 30-120 | 7.79 | 250 | 31 | 200 | 39 | 300 | 26 |
| ATS-HP-D9.5L100S174W-155 | 100 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 50 | 174 | 40 | 218 | 60 | 145 |

Round Heat Pipes



$$Q_{max} = \frac{Q_t}{L_{eff}} \times 1000$$

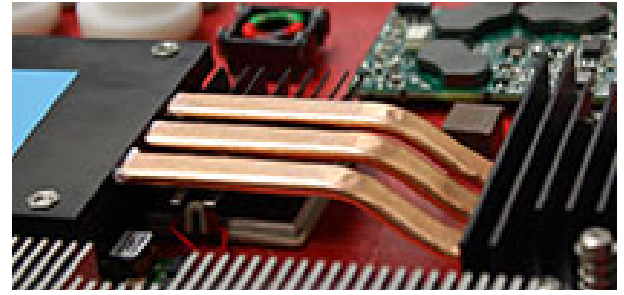
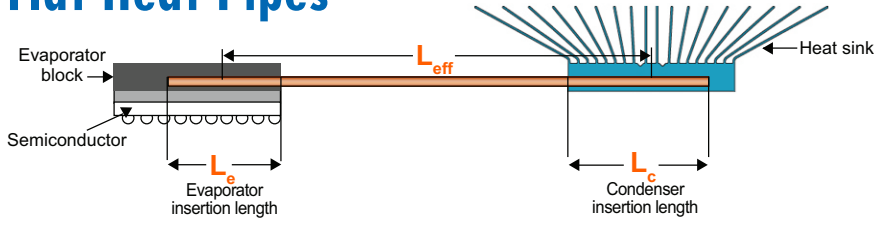
$$L_{eff} = L - (L_e + L_c) / 2$$

PRODUCT SPECIFICATIONS

L=Length (mm); D=Diameter (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR=Temperature Range (°C)

| Part Number | L | D | WT | WF | TR | QT (W·m) | L _{eff} (mm) | Q _{max} (W) | L _{eff} (mm) | Q _{max} (W) | L _{eff} (mm) | Q _{max} (W) |
|--------------------------|-----|-----|----|----------------------------|--------|----------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| ATS-HP-D9.5L150S116W-156 | 150 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 75 | 116 | 60 | 145 | 90 | 97 |
| ATS-HP-D9.5L200S87W-157 | 200 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 100 | 87 | 80 | 109 | 120 | 73 |
| ATS-HP-D9.5L250S69W-158 | 250 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 125 | 70 | 100 | 87 | 150 | 58 |
| ATS-HP-D9.5L300S58W-159 | 300 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 150 | 58 | 120 | 73 | 180 | 48 |
| ATS-HP-D9.5L350S49W-160 | 350 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 175 | 50 | 140 | 62 | 210 | 42 |
| ATS-HP-D9.5L400S43W-161 | 400 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 200 | 44 | 160 | 54 | 240 | 36 |
| ATS-HP-D9.5L450S38W-162 | 450 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 225 | 39 | 180 | 48 | 270 | 32 |
| ATS-HP-D9.5L500S34W-163 | 500 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 250 | 35 | 200 | 44 | 300 | 29 |
| ATS-HP-D9.5L550S31W-164 | 550 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 275 | 32 | 220 | 40 | 330 | 26 |
| ATS-HP-D9.5L600S29W-165 | 600 | 9.5 | S | Distilled H ₂ O | 30-120 | 8.72 | 300 | 29 | 240 | 36 | 360 | 24 |
| ATS-HP-D10L100S199W-166 | 100 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 50 | 200 | 40 | 249 | 60 | 166 |
| ATS-HP-D10L150S133W-167 | 150 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 75 | 133 | 60 | 166 | 90 | 111 |
| ATS-HP-D10L200S99W-168 | 200 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 100 | 100 | 80 | 125 | 120 | 83 |
| ATS-HP-D10L250S79W-169 | 250 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 125 | 80 | 100 | 100 | 150 | 67 |
| ATS-HP-D10L300S66W-170 | 300 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 150 | 67 | 120 | 83 | 180 | 55 |
| ATS-HP-D10L350S57W-171 | 350 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 175 | 57 | 140 | 71 | 210 | 48 |
| ATS-HP-D10L400S49W-172 | 400 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 200 | 50 | 160 | 62 | 240 | 42 |
| ATS-HP-D10L450S44W-173 | 450 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 225 | 44 | 180 | 55 | 270 | 37 |
| ATS-HP-D10L500S39W-174 | 500 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 250 | 40 | 200 | 50 | 300 | 33 |
| ATS-HP-D10L550S36W-175 | 550 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 275 | 36 | 220 | 45 | 330 | 30 |
| ATS-HP-D10L600S33W-176 | 600 | 10 | S | Distilled H ₂ O | 30-120 | 9.98 | 300 | 33 | 240 | 42 | 360 | 28 |

Flat Heat Pipes



(W) ±0.5mm

Heat Pipe Width

(H) ±0.5mm
Heat Pipe Height

(L) ±2.0%
Heat Pipe Length

$$Q_{\max} = \frac{Q_t}{L_{\text{eff}}} \times 1000$$

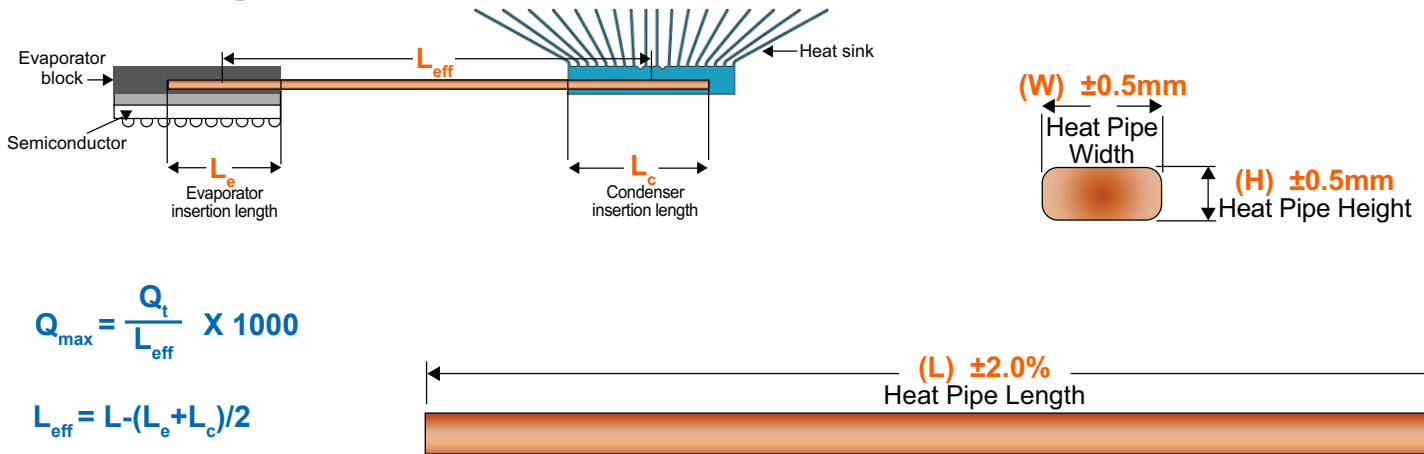
$$L_{\text{eff}} = L - (L_e + L_c) / 2$$

PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L _{eff} (mm) | Q _{max} (W) | L _{eff} (mm) | Q _{max} (W) | L _{eff} (mm) | Q _{max} (W) |
|-----------------------|-----|-------|------|----|----------------------------|--------|----------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| ATS-HP-F9L100S80W-012 | 100 | 10.50 | 4.50 | S | Distilled H ₂ O | 30-120 | 3.08 | 50 | 62 | 62.50 | 49 | 75 | 41 |
| ATS-HP-F9L150S70W-013 | 150 | 10.50 | 4.50 | S | Distilled H ₂ O | 30-120 | 5.51 | 75 | 74 | 106.25 | 52 | 125 | 44 |
| ATS-HP-F9L200S70W-014 | 200 | 10.50 | 4.50 | S | Distilled H ₂ O | 30-120 | 9.10 | 100 | 91 | 125 | 73 | 150 | 61 |
| ATS-HP-F9L250S70W-015 | 250 | 10.50 | 4.50 | S | Distilled H ₂ O | 30-120 | 10.01 | 125 | 80 | 150 | 67 | 200 | 50 |
| ATS-HP-F7L100S70W-016 | 100 | 11.20 | 3.50 | S | Distilled H ₂ O | 30-120 | 3.05 | 50 | 61 | 62.50 | 49 | 75 | 41 |
| ATS-HP-F7L150S65W-017 | 150 | 11.20 | 3.50 | S | Distilled H ₂ O | 30-120 | 6.37 | 75 | 85 | 106.25 | 60 | 125 | 51 |
| ATS-HP-F7L200S65W-018 | 200 | 11.20 | 3.50 | S | Distilled H ₂ O | 30-120 | 9.14 | 100 | 91 | 125 | 73 | 150 | 61 |
| ATS-HP-F7L250S65W-019 | 250 | 11.20 | 3.50 | S | Distilled H ₂ O | 30-120 | 12.46 | 125 | 100 | 150 | 83 | 200 | 62 |
| ATS-HP-F6L100S70W-020 | 100 | 8 | 3 | S | Distilled H ₂ O | 30-120 | 3.50 | 50 | 70 | 62.50 | 56 | 75 | 47 |
| ATS-HP-F6L150S60W-021 | 150 | 8 | 3 | S | Distilled H ₂ O | 30-120 | 3.68 | 75 | 49 | 106.25 | 35 | 125 | 29 |
| ATS-HP-F6L200S50W-022 | 200 | 8 | 3 | S | Distilled H ₂ O | 30-120 | 3.80 | 100 | 38 | 125 | 30 | 150 | 25 |
| ATS-HP-F6L250S50W-023 | 250 | 8 | 3 | S | Distilled H ₂ O | 30-120 | 9.35 | 125 | 75 | 150 | 62 | 200 | 47 |
| ATS-HP-F5L100S45W-024 | 100 | 8.20 | 2.50 | S | Distilled H ₂ O | 30-120 | 2.18 | 50 | 44 | 62.50 | 35 | 75 | 29 |
| ATS-HP-F5L150S40W-025 | 150 | 8.20 | 2.50 | S | Distilled H ₂ O | 30-120 | 7.35 | 75 | 98 | 106.25 | 69 | 125 | 59 |
| ATS-HP-F5L200S35W-026 | 200 | 8.20 | 2.50 | S | Distilled H ₂ O | 30-120 | 1.66 | 100 | 17 | 125 | 13 | 150 | 11 |
| ATS-HP-F5L250S35W-027 | 250 | 8.20 | 2.50 | S | Distilled H ₂ O | 30-120 | 2.67 | 125 | 21 | 150 | 18 | 200 | 13 |
| ATS-HP-F6L100S40W-028 | 100 | 8 | 3 | S | Distilled H ₂ O | 30-120 | 2.39 | 50 | 48 | 62.50 | 38 | 75 | 32 |
| ATS-HP-F6L150S30W-029 | 150 | 8 | 3 | S | Distilled H ₂ O | 30-120 | 2.21 | 75 | 29 | 106.25 | 21 | 125 | 18 |
| ATS-HP-F6L200S30W-030 | 200 | 8 | 3 | S | Distilled H ₂ O | 30-120 | 2.93 | 100 | 29 | 125 | 23 | 150 | 20 |
| ATS-HP-F5L100S30W-031 | 100 | 8.20 | 2.50 | S | Distilled H ₂ O | 30-120 | 3.48 | 50 | 70 | 62.50 | 56 | 75 | 46 |
| ATS-HP-F5L150S25W-032 | 150 | 8.20 | 2.50 | S | Distilled H ₂ O | 30-120 | 2.57 | 75 | 34 | 106.25 | 24 | 125 | 21 |
| ATS-HP-F5L200S25W-033 | 200 | 8.20 | 2.50 | S | Distilled H ₂ O | 30-120 | 3.92 | 100 | 39 | 125 | 31 | 150 | 26 |

Flat Heat Pipes

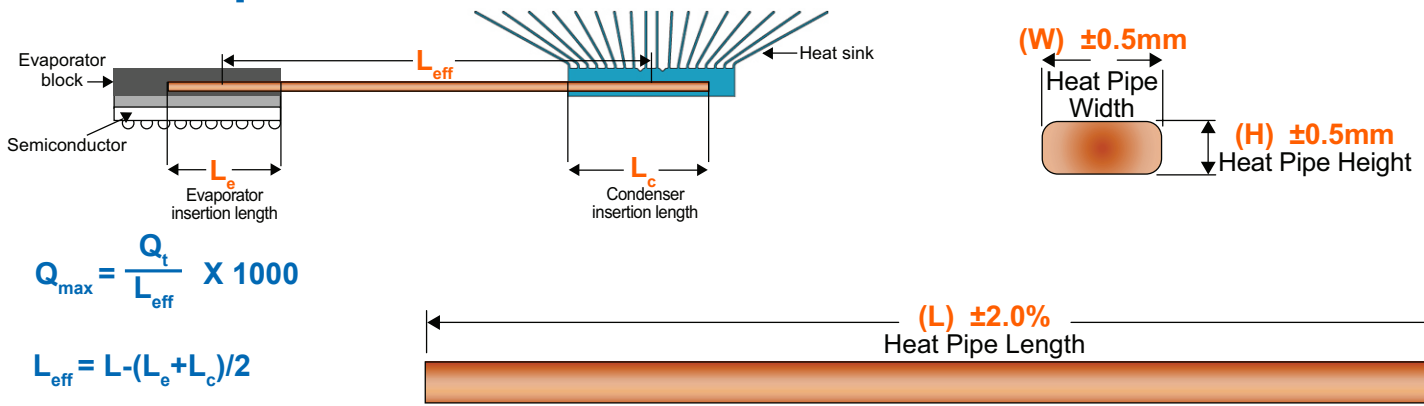


PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) |
|-----------------------|-----|------|-----|----|----------------------------|--------|----------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| ATS-HP-F4L70S35W-178 | 70 | 5.39 | 2 | S | Distilled H ₂ O | 30-120 | 1.86 | 53 | 35 | 42 | 44 | 63 | 29 |
| ATS-HP-F4L100S25W-179 | 100 | 5.39 | 2 | S | Distilled H ₂ O | 30-120 | 1.86 | 75 | 25 | 60 | 31 | 90 | 21 |
| ATS-HP-F4L150S16W-180 | 150 | 5.39 | 2 | S | Distilled H ₂ O | 30-120 | 1.86 | 113 | 16 | 90 | 21 | 135 | 14 |
| ATS-HP-F4L200S12W-181 | 200 | 5.39 | 2 | S | Distilled H ₂ O | 30-120 | 1.86 | 150 | 12 | 120 | 15 | 180 | 10 |
| ATS-HP-F4L250S10W-182 | 250 | 5.39 | 2 | S | Distilled H ₂ O | 30-120 | 1.86 | 188 | 10 | 150 | 12 | 225 | 8 |
| ATS-HP-F4L300S8W-183 | 300 | 5.39 | 2 | S | Distilled H ₂ O | 30-120 | 1.86 | 225 | 8 | 180 | 10 | 270 | 7 |
| ATS-HP-F4L350S7W-184 | 350 | 5.39 | 2 | S | Distilled H ₂ O | 30-120 | 1.86 | 263 | 7 | 210 | 9 | 315 | 6 |
| ATS-HP-F4L70S39W-185 | 70 | 5.1 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.05 | 53 | 39 | 42 | 49 | 63 | 33 |
| ATS-HP-F4L100S27W-186 | 100 | 5.1 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.05 | 75 | 27 | 60 | 34 | 90 | 23 |
| ATS-HP-F4L150S18W-187 | 150 | 5.1 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.05 | 113 | 18 | 90 | 23 | 135 | 15 |
| ATS-HP-F4L200S14W-188 | 200 | 5.1 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.05 | 150 | 14 | 120 | 17 | 180 | 11 |
| ATS-HP-F4L250S11W-189 | 250 | 5.1 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.05 | 188 | 11 | 150 | 14 | 225 | 9 |
| ATS-HP-F4L300S9W-190 | 300 | 5.1 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.05 | 225 | 9 | 180 | 11 | 270 | 8 |
| ATS-HP-F4L350S8W-191 | 350 | 5.1 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.05 | 263 | 8 | 210 | 10 | 315 | 7 |
| ATS-HP-F4L70S41W-192 | 70 | 4.83 | 3 | S | Distilled H ₂ O | 30-120 | 2.17 | 53 | 41 | 42 | 52 | 63 | 34 |
| ATS-HP-F4L100S29W-193 | 100 | 4.83 | 3 | S | Distilled H ₂ O | 30-120 | 2.17 | 75 | 29 | 60 | 36 | 90 | 24 |
| ATS-HP-F4L150S19W-194 | 150 | 4.83 | 3 | S | Distilled H ₂ O | 30-120 | 2.17 | 113 | 19 | 90 | 24 | 135 | 16 |
| ATS-HP-F4L200S14W-195 | 200 | 4.83 | 3 | S | Distilled H ₂ O | 30-120 | 2.17 | 150 | 14 | 120 | 18 | 180 | 12 |
| ATS-HP-F4L250S12W-196 | 250 | 4.83 | 3 | S | Distilled H ₂ O | 30-120 | 2.17 | 188 | 12 | 150 | 14 | 225 | 10 |
| ATS-HP-F4L300S10W-197 | 300 | 4.83 | 3 | S | Distilled H ₂ O | 30-120 | 2.17 | 225 | 10 | 180 | 12 | 270 | 8 |
| ATS-HP-F4L350S8W-198 | 350 | 4.83 | 3 | S | Distilled H ₂ O | 30-120 | 2.17 | 263 | 8 | 210 | 10 | 315 | 7 |
| ATS-HP-F5L70S45W-199 | 70 | 6.95 | 2 | S | Distilled H ₂ O | 30-120 | 2.38 | 53 | 45 | 42 | 57 | 63 | 38 |
| ATS-HP-F5L100S32W-200 | 100 | 6.95 | 2 | S | Distilled H ₂ O | 30-120 | 2.38 | 75 | 32 | 60 | 40 | 90 | 26 |
| ATS-HP-F5L150S21W-201 | 150 | 6.95 | 2 | S | Distilled H ₂ O | 30-120 | 2.38 | 113 | 21 | 90 | 26 | 135 | 18 |
| ATS-HP-F5L200S16W-202 | 200 | 6.95 | 2 | S | Distilled H ₂ O | 30-120 | 2.38 | 150 | 16 | 120 | 20 | 180 | 13 |

Flat Heat Pipes



$$Q_{\max} = \frac{Q_t}{L_{\text{eff}}} \times 1000$$

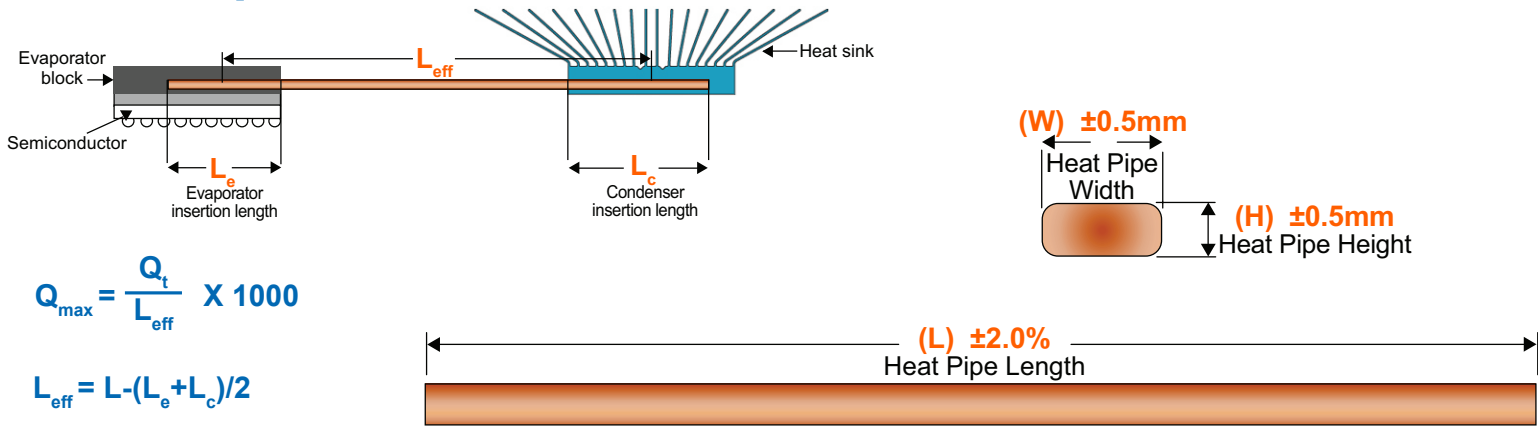
$$L_{\text{eff}} = L - (L_e + L_c) / 2$$

PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) |
|-----------------------|-----|------|-----|----|----------------------------|--------|----------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| ATS-HP-F5L250S13W-203 | 250 | 6.95 | 2 | S | Distilled H ₂ O | 30-120 | 2.38 | 188 | 13 | 150 | 16 | 225 | 11 |
| ATS-HP-F5L300S11W-204 | 300 | 6.95 | 2 | S | Distilled H ₂ O | 30-120 | 2.38 | 225 | 11 | 180 | 13 | 270 | 9 |
| ATS-HP-F5L350S9W-205 | 350 | 6.95 | 2 | S | Distilled H ₂ O | 30-120 | 2.38 | 263 | 9 | 210 | 11 | 315 | 8 |
| ATS-HP-F5L400S8W-206 | 400 | 6.95 | 2 | S | Distilled H ₂ O | 30-120 | 2.38 | 300 | 8 | 240 | 10 | 360 | 7 |
| ATS-HP-F5L70S50W-207 | 70 | 6.69 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.61 | 53 | 50 | 42 | 62 | 63 | 41 |
| ATS-HP-F5L100S35W-208 | 100 | 6.69 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.61 | 75 | 35 | 60 | 44 | 90 | 29 |
| ATS-HP-F5L150S23W-209 | 150 | 6.69 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.61 | 113 | 23 | 90 | 29 | 135 | 19 |
| ATS-HP-F5L200S17W-210 | 200 | 6.69 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.61 | 150 | 17 | 120 | 22 | 180 | 15 |
| ATS-HP-F5L250S14W-211 | 250 | 6.69 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.61 | 188 | 14 | 150 | 17 | 225 | 12 |
| ATS-HP-F5L300S12W-212 | 300 | 6.69 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.61 | 225 | 12 | 180 | 15 | 270 | 10 |
| ATS-HP-F5L350S10W-213 | 350 | 6.69 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.61 | 263 | 10 | 210 | 12 | 315 | 8 |
| ATS-HP-F5L400S9W-214 | 400 | 6.69 | 2.5 | S | Distilled H ₂ O | 30-120 | 2.61 | 300 | 9 | 240 | 11 | 360 | 7 |
| ATS-HP-F5L70S52W-215 | 70 | 6.44 | 3 | S | Distilled H ₂ O | 30-120 | 2.74 | 53 | 52 | 42 | 65 | 63 | 44 |
| ATS-HP-F5L100S37W-216 | 100 | 6.44 | 3 | S | Distilled H ₂ O | 30-120 | 2.74 | 75 | 37 | 60 | 46 | 90 | 30 |
| ATS-HP-F5L150S24W-217 | 150 | 6.44 | 3 | S | Distilled H ₂ O | 30-120 | 2.74 | 113 | 24 | 90 | 30 | 135 | 20 |
| ATS-HP-F5L200S18W-218 | 200 | 6.44 | 3 | S | Distilled H ₂ O | 30-120 | 2.74 | 150 | 18 | 120 | 23 | 180 | 15 |
| ATS-HP-F5L250S15W-219 | 250 | 6.44 | 3 | S | Distilled H ₂ O | 30-120 | 2.74 | 188 | 15 | 150 | 18 | 225 | 12 |
| ATS-HP-F5L300S12W-220 | 300 | 6.44 | 3 | S | Distilled H ₂ O | 30-120 | 2.74 | 225 | 12 | 180 | 15 | 270 | 10 |
| ATS-HP-F5L350S10W-221 | 350 | 6.44 | 3 | S | Distilled H ₂ O | 30-120 | 2.74 | 263 | 10 | 210 | 13 | 315 | 9 |
| ATS-HP-F5L400S9W-222 | 400 | 6.44 | 3 | S | Distilled H ₂ O | 30-120 | 2.74 | 300 | 9 | 240 | 11 | 360 | 8 |
| ATS-HP-F5L70S54W-223 | 70 | 6.18 | 3.5 | S | Distilled H ₂ O | 30-120 | 2.85 | 53 | 54 | 42 | 68 | 63 | 45 |
| ATS-HP-F5L100S38W-224 | 100 | 6.18 | 3.5 | S | Distilled H ₂ O | 30-120 | 2.85 | 75 | 38 | 60 | 47 | 90 | 32 |
| ATS-HP-F5L150S25W-225 | 150 | 6.18 | 3.5 | S | Distilled H ₂ O | 30-120 | 2.85 | 113 | 25 | 90 | 32 | 135 | 21 |
| ATS-HP-F5L200S19W-226 | 200 | 6.18 | 3.5 | S | Distilled H ₂ O | 30-120 | 2.85 | 150 | 19 | 120 | 24 | 180 | 16 |
| ATS-HP-F5L250S15W-227 | 250 | 6.18 | 3.5 | S | Distilled H ₂ O | 30-120 | 2.85 | 188 | 15 | 150 | 19 | 225 | 13 |

Flat Heat Pipes



$$Q_{max} = \frac{Q_t}{L_{eff}} \times 1000$$

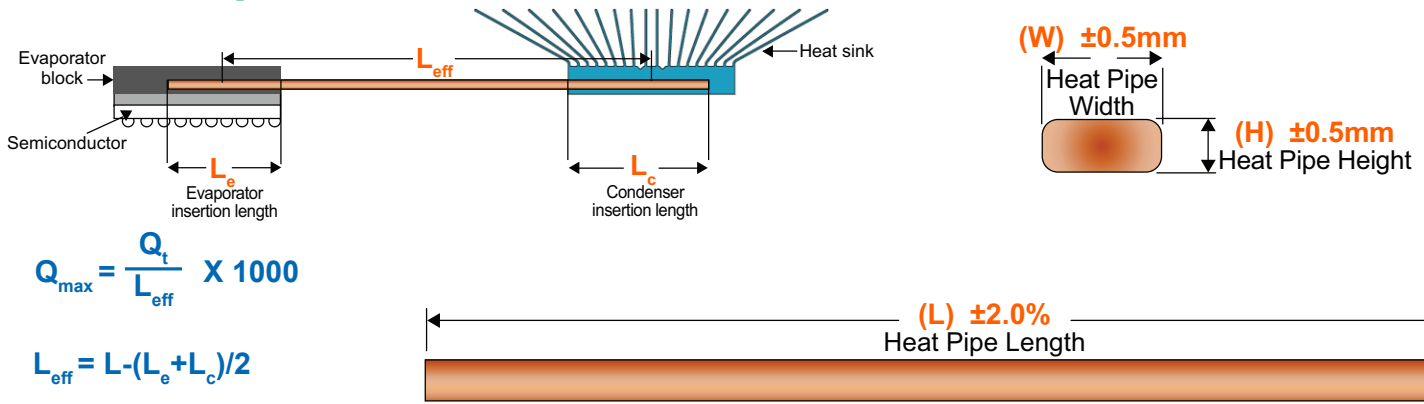
$$L_{eff} = L - (L_e + L_c) / 2$$

PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | W | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{max} (W) | L_{eff} (mm) | Q_{max} (W) | L_{eff} (mm) | Q_{max} (W) |
|-----------------------|-----|------|-----|----|----------------------------|--------|----------|----------------|---------------|----------------|---------------|----------------|---------------|
| ATS-HP-F5L300S13W-228 | 300 | 6.18 | 3.5 | S | Distilled H ₂ O | 30-120 | 2.85 | 225 | 13 | 180 | 16 | 270 | 11 |
| ATS-HP-F5L350S11W-229 | 350 | 6.18 | 3.5 | S | Distilled H ₂ O | 30-120 | 2.85 | 263 | 11 | 210 | 14 | 315 | 9 |
| ATS-HP-F5L400S9W-230 | 400 | 6.18 | 3.5 | S | Distilled H ₂ O | 30-120 | 2.85 | 300 | 9 | 240 | 12 | 360 | 8 |
| ATS-HP-F5L70S56W-231 | 70 | 5.9 | 4 | S | Distilled H ₂ O | 30-120 | 2.93 | 53 | 56 | 42 | 70 | 63 | 47 |
| ATS-HP-F5L100S39W-232 | 100 | 5.9 | 4 | S | Distilled H ₂ O | 30-120 | 2.93 | 75 | 39 | 60 | 49 | 90 | 33 |
| ATS-HP-F5L150S26W-233 | 150 | 5.9 | 4 | S | Distilled H ₂ O | 30-120 | 2.93 | 113 | 26 | 90 | 33 | 135 | 22 |
| ATS-HP-F5L200S20W-234 | 200 | 5.9 | 4 | S | Distilled H ₂ O | 30-120 | 2.93 | 150 | 20 | 120 | 24 | 180 | 16 |
| ATS-HP-F5L250S16W-235 | 250 | 5.9 | 4 | S | Distilled H ₂ O | 30-120 | 2.93 | 188 | 16 | 150 | 20 | 225 | 13 |
| ATS-HP-F5L300S13W-236 | 300 | 5.9 | 4 | S | Distilled H ₂ O | 30-120 | 2.93 | 225 | 13 | 180 | 16 | 270 | 11 |
| ATS-HP-F5L350S11W-237 | 350 | 5.9 | 4 | S | Distilled H ₂ O | 30-120 | 2.93 | 263 | 11 | 210 | 14 | 315 | 9 |
| ATS-HP-F5L400S10W-238 | 400 | 5.9 | 4 | S | Distilled H ₂ O | 30-120 | 2.93 | 300 | 10 | 240 | 12 | 360 | 8 |
| ATS-HP-F6L70S56W-239 | 70 | 8.6 | 2 | S | Distilled H ₂ O | 30-120 | 2.93 | 53 | 56 | 42 | 70 | 63 | 46 |
| ATS-HP-F6L100S39W-240 | 100 | 8.6 | 2 | S | Distilled H ₂ O | 30-120 | 2.93 | 75 | 39 | 60 | 49 | 90 | 33 |
| ATS-HP-F6L150S26W-241 | 150 | 8.6 | 2 | S | Distilled H ₂ O | 30-120 | 2.93 | 113 | 26 | 90 | 33 | 135 | 22 |
| ATS-HP-F6L200S20W-242 | 200 | 8.6 | 2 | S | Distilled H ₂ O | 30-120 | 2.93 | 150 | 20 | 120 | 24 | 180 | 16 |
| ATS-HP-F6L250S16W-243 | 250 | 8.6 | 2 | S | Distilled H ₂ O | 30-120 | 2.93 | 188 | 16 | 150 | 20 | 225 | 13 |
| ATS-HP-F6L300S13W-244 | 300 | 8.6 | 2 | S | Distilled H ₂ O | 30-120 | 2.93 | 225 | 13 | 180 | 16 | 270 | 11 |
| ATS-HP-F6L70S59W-245 | 70 | 8.37 | 2.3 | S | Distilled H ₂ O | 30-120 | 3.09 | 53 | 59 | 42 | 74 | 63 | 49 |
| ATS-HP-F6L100S41W-246 | 100 | 8.37 | 2.3 | S | Distilled H ₂ O | 30-120 | 3.09 | 75 | 41 | 60 | 51 | 90 | 34 |
| ATS-HP-F6L150S27W-247 | 150 | 8.37 | 2.3 | S | Distilled H ₂ O | 30-120 | 3.09 | 113 | 27 | 90 | 34 | 135 | 23 |
| ATS-HP-F6L200S21W-248 | 200 | 8.37 | 2.3 | S | Distilled H ₂ O | 30-120 | 3.09 | 150 | 21 | 120 | 26 | 180 | 17 |
| ATS-HP-F6L250S16W-249 | 250 | 8.37 | 2.3 | S | Distilled H ₂ O | 30-120 | 3.09 | 188 | 16 | 150 | 21 | 225 | 14 |
| ATS-HP-F6L300S14W-250 | 300 | 8.37 | 2.3 | S | Distilled H ₂ O | 30-120 | 3.09 | 225 | 14 | 180 | 17 | 270 | 11 |
| ATS-HP-F6L70S60W-251 | 70 | 8.28 | 2.5 | S | Distilled H ₂ O | 30-120 | 3.17 | 53 | 60 | 42 | 75 | 63 | 50 |

Flat Heat Pipes

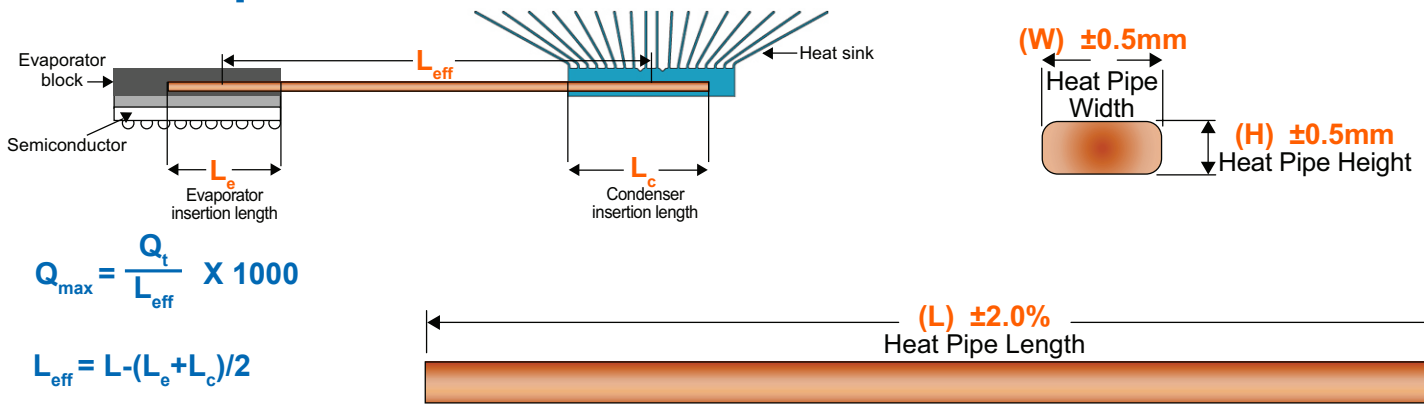


PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L _{eff} (mm) | Q _{max} (W) | L _{eff} (mm) | Q _{max} (W) | L _{eff} (mm) | Q _{max} (W) |
|-----------------------|-----|------|-----|----|----------------------------|--------|----------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| ATS-HP-F6L100S42W-252 | 100 | 8.28 | 2.5 | S | Distilled H ₂ O | 30-120 | 3.17 | 75 | 42 | 60 | 53 | 90 | 35 |
| ATS-HP-F6L150S28W-253 | 150 | 8.28 | 2.5 | S | Distilled H ₂ O | 30-120 | 3.17 | 113 | 28 | 90 | 35 | 135 | 23 |
| ATS-HP-F6L200S21W-254 | 200 | 8.28 | 2.5 | S | Distilled H ₂ O | 30-120 | 3.17 | 150 | 21 | 120 | 26 | 180 | 18 |
| ATS-HP-F6L250S17W-255 | 250 | 8.28 | 2.5 | S | Distilled H ₂ O | 30-120 | 3.17 | 188 | 17 | 150 | 21 | 225 | 14 |
| ATS-HP-F6L300S14W-256 | 300 | 8.28 | 2.5 | S | Distilled H ₂ O | 30-120 | 3.17 | 225 | 14 | 180 | 18 | 270 | 12 |
| ATS-HP-F6L350S12W-257 | 350 | 8.28 | 2.5 | S | Distilled H ₂ O | 30-120 | 3.17 | 263 | 12 | 210 | 15 | 315 | 10 |
| ATS-HP-F6L400S11W-258 | 400 | 8.28 | 2.5 | S | Distilled H ₂ O | 30-120 | 3.17 | 300 | 11 | 240 | 13 | 360 | 9 |
| ATS-HP-F6L70S62W-259 | 70 | 8.19 | 2.7 | S | Distilled H ₂ O | 30-120 | 3.23 | 53 | 62 | 42 | 77 | 63 | 51 |
| ATS-HP-F6L100S43W-260 | 100 | 8.19 | 2.7 | S | Distilled H ₂ O | 30-120 | 3.23 | 75 | 43 | 60 | 54 | 90 | 36 |
| ATS-HP-F6L150S29W-261 | 150 | 8.19 | 2.7 | S | Distilled H ₂ O | 30-120 | 3.23 | 113 | 29 | 90 | 36 | 135 | 24 |
| ATS-HP-F6L200S22W-262 | 200 | 8.19 | 2.7 | S | Distilled H ₂ O | 30-120 | 3.23 | 150 | 22 | 120 | 27 | 180 | 18 |
| ATS-HP-F6L250S17W-263 | 250 | 8.19 | 2.7 | S | Distilled H ₂ O | 30-120 | 3.23 | 188 | 17 | 150 | 22 | 225 | 14 |
| ATS-HP-F6L300S14W-264 | 300 | 8.19 | 2.7 | S | Distilled H ₂ O | 30-120 | 3.23 | 225 | 14 | 180 | 18 | 270 | 12 |
| ATS-HP-F6L350S12W-265 | 350 | 8.19 | 2.7 | S | Distilled H ₂ O | 30-120 | 3.23 | 263 | 12 | 210 | 15 | 315 | 10 |
| ATS-HP-F6L400S11W-266 | 400 | 8.19 | 2.7 | S | Distilled H ₂ O | 30-120 | 3.23 | 300 | 11 | 240 | 13 | 360 | 9 |
| ATS-HP-F6L70S62W-267 | 70 | 8.13 | 2.8 | S | Distilled H ₂ O | 30-120 | 3.26 | 53 | 62 | 42 | 78 | 63 | 52 |
| ATS-HP-F6L100S43W-268 | 100 | 8.13 | 2.8 | S | Distilled H ₂ O | 30-120 | 3.26 | 75 | 43 | 60 | 54 | 90 | 36 |
| ATS-HP-F6L150S29W-269 | 150 | 8.13 | 2.8 | S | Distilled H ₂ O | 30-120 | 3.26 | 113 | 29 | 90 | 36 | 135 | 24 |
| ATS-HP-F6L200S22W-270 | 200 | 8.13 | 2.8 | S | Distilled H ₂ O | 30-120 | 3.26 | 150 | 22 | 120 | 27 | 180 | 18 |
| ATS-HP-F6L250S17W-271 | 250 | 8.13 | 2.8 | S | Distilled H ₂ O | 30-120 | 3.26 | 188 | 17 | 150 | 22 | 225 | 14 |
| ATS-HP-F6L300S14W-272 | 300 | 8.13 | 2.8 | S | Distilled H ₂ O | 30-120 | 3.26 | 225 | 14 | 180 | 18 | 270 | 12 |
| ATS-HP-F6L350S12W-273 | 350 | 8.13 | 2.8 | S | Distilled H ₂ O | 30-120 | 3.26 | 263 | 12 | 210 | 16 | 315 | 10 |
| ATS-HP-F6L400S11W-274 | 400 | 8.13 | 2.8 | S | Distilled H ₂ O | 30-120 | 3.26 | 300 | 11 | 240 | 14 | 360 | 9 |
| ATS-HP-F6L70S63W-275 | 70 | 8.05 | 3 | S | Distilled H ₂ O | 30-120 | 3.31 | 53 | 63 | 42 | 79 | 63 | 53 |
| ATS-HP-F6L100S44W-276 | 100 | 8.05 | 3 | S | Distilled H ₂ O | 30-120 | 3.31 | 75 | 44 | 60 | 55 | 90 | 37 |

Flat Heat Pipes

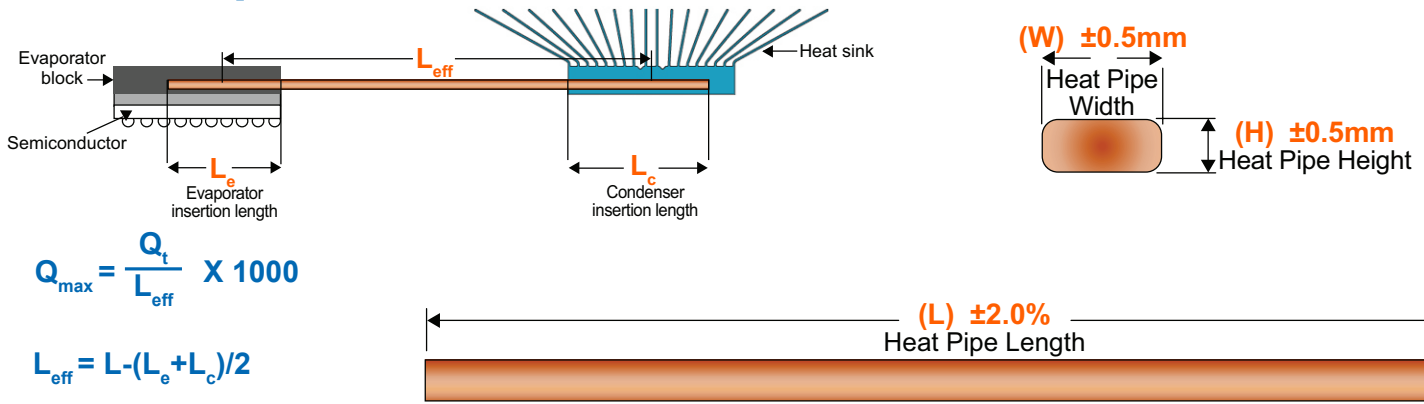


PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{max} (W) | L_{eff} (mm) | Q_{max} (W) | L_{eff} (mm) | Q_{max} (W) |
|-----------------------|-----|------|-----|----|----------------------------|--------|----------|----------------|---------------|----------------|---------------|----------------|---------------|
| ATS-HP-F6L150S29W-277 | 150 | 8.05 | 3 | S | Distilled H ₂ O | 30-120 | 3.31 | 113 | 29 | 90 | 37 | 135 | 25 |
| ATS-HP-F6L200S22W-278 | 200 | 8.05 | 3 | S | Distilled H ₂ O | 30-120 | 3.31 | 150 | 22 | 120 | 28 | 180 | 18 |
| ATS-HP-F6L250S18W-279 | 250 | 8.05 | 3 | S | Distilled H ₂ O | 30-120 | 3.31 | 188 | 18 | 150 | 22 | 225 | 15 |
| ATS-HP-F6L300S15W-280 | 300 | 8.05 | 3 | S | Distilled H ₂ O | 30-120 | 3.31 | 225 | 15 | 180 | 18 | 270 | 12 |
| ATS-HP-F6L350S13W-281 | 350 | 8.05 | 3 | S | Distilled H ₂ O | 30-120 | 3.31 | 263 | 13 | 210 | 16 | 315 | 11 |
| ATS-HP-F6L400S11W-282 | 400 | 8.05 | 3 | S | Distilled H ₂ O | 30-120 | 3.31 | 300 | 11 | 240 | 14 | 360 | 9 |
| ATS-HP-F6L70S64W-283 | 70 | 7.9 | 3.2 | S | Distilled H ₂ O | 30-120 | 3.34 | 53 | 64 | 42 | 80 | 63 | 53 |
| ATS-HP-F6L100S45W-284 | 100 | 7.9 | 3.2 | S | Distilled H ₂ O | 30-120 | 3.34 | 75 | 45 | 60 | 56 | 90 | 37 |
| ATS-HP-F6L150S30W-285 | 150 | 7.9 | 3.2 | S | Distilled H ₂ O | 30-120 | 3.34 | 113 | 30 | 90 | 37 | 135 | 25 |
| ATS-HP-F6L200S22W-286 | 200 | 7.9 | 3.2 | S | Distilled H ₂ O | 30-120 | 3.34 | 150 | 22 | 120 | 28 | 180 | 19 |
| ATS-HP-F6L250S18W-287 | 250 | 7.9 | 3.2 | S | Distilled H ₂ O | 30-120 | 3.34 | 188 | 18 | 150 | 22 | 225 | 15 |
| ATS-HP-F6L300S15W-288 | 300 | 7.9 | 3.2 | S | Distilled H ₂ O | 30-120 | 3.34 | 225 | 15 | 180 | 19 | 270 | 12 |
| ATS-HP-F6L350S13W-289 | 350 | 7.9 | 3.2 | S | Distilled H ₂ O | 30-120 | 3.34 | 263 | 13 | 210 | 16 | 315 | 11 |
| ATS-HP-F6L400S11W-290 | 400 | 7.9 | 3.2 | S | Distilled H ₂ O | 30-120 | 3.34 | 300 | 11 | 240 | 14 | 360 | 9 |
| ATS-HP-F6L70S65W-291 | 70 | 7.75 | 3.5 | S | Distilled H ₂ O | 30-120 | 3.41 | 53 | 65 | 42 | 81 | 63 | 54 |
| ATS-HP-F6L100S45W-292 | 100 | 7.75 | 3.5 | S | Distilled H ₂ O | 30-120 | 3.41 | 75 | 45 | 60 | 57 | 90 | 38 |
| ATS-HP-F6L150S30W-293 | 150 | 7.75 | 3.5 | S | Distilled H ₂ O | 30-120 | 3.41 | 113 | 30 | 90 | 38 | 135 | 25 |
| ATS-HP-F6L200S23W-294 | 200 | 7.75 | 3.5 | S | Distilled H ₂ O | 30-120 | 3.41 | 150 | 23 | 120 | 28 | 180 | 19 |
| ATS-HP-F6L250S18W-295 | 250 | 7.75 | 3.5 | S | Distilled H ₂ O | 30-120 | 3.41 | 188 | 18 | 150 | 23 | 225 | 15 |
| ATS-HP-F6L300S15W-296 | 300 | 7.75 | 3.5 | S | Distilled H ₂ O | 30-120 | 3.41 | 225 | 15 | 180 | 19 | 270 | 13 |
| ATS-HP-F6L350S13W-297 | 350 | 7.75 | 3.5 | S | Distilled H ₂ O | 30-120 | 3.41 | 263 | 13 | 210 | 16 | 315 | 11 |
| ATS-HP-F6L400S11W-298 | 400 | 7.75 | 3.5 | S | Distilled H ₂ O | 30-120 | 3.41 | 300 | 11 | 240 | 14 | 360 | 9 |
| ATS-HP-F6L70S66W-299 | 70 | 7.61 | 3.8 | S | Distilled H ₂ O | 30-120 | 3.47 | 53 | 66 | 42 | 83 | 63 | 55 |
| ATS-HP-F6L100S46W-300 | 100 | 7.61 | 3.8 | S | Distilled H ₂ O | 30-120 | 3.47 | 75 | 46 | 60 | 58 | 90 | 39 |
| ATS-HP-F6L150S31W-301 | 150 | 7.61 | 3.8 | S | Distilled H ₂ O | 30-120 | 3.47 | 113 | 31 | 90 | 39 | 135 | 26 |

Flat Heat Pipes

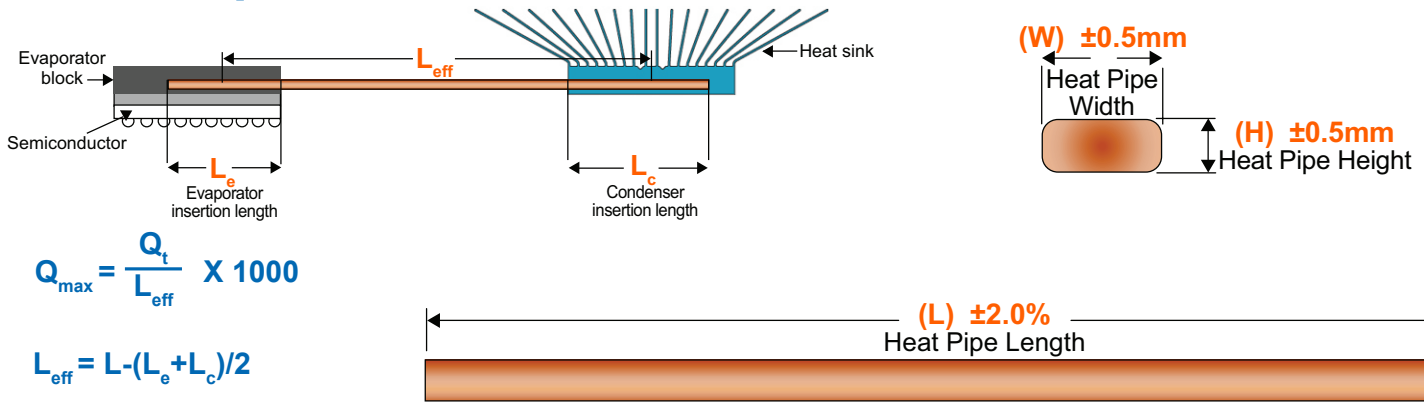


PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) |
|-----------------------|-----|------|-----|----|----------------------------|--------|----------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| ATS-HP-F6L200S23W-302 | 200 | 7.61 | 3.8 | S | Distilled H ₂ O | 30-120 | 3.47 | 150 | 23 | 120 | 29 | 180 | 19 |
| ATS-HP-F6L250S18W-303 | 250 | 7.61 | 3.8 | S | Distilled H ₂ O | 30-120 | 3.47 | 188 | 18 | 150 | 23 | 225 | 15 |
| ATS-HP-F6L300S15W-304 | 300 | 7.61 | 3.8 | S | Distilled H ₂ O | 30-120 | 3.47 | 225 | 15 | 180 | 19 | 270 | 13 |
| ATS-HP-F6L350S13W-305 | 350 | 7.61 | 3.8 | S | Distilled H ₂ O | 30-120 | 3.47 | 263 | 13 | 210 | 17 | 315 | 11 |
| ATS-HP-F6L400S12W-306 | 400 | 7.61 | 3.8 | S | Distilled H ₂ O | 30-120 | 3.47 | 300 | 12 | 240 | 14 | 360 | 10 |
| ATS-HP-F6L70S67W-307 | 70 | 7.49 | 4 | S | Distilled H ₂ O | 30-120 | 3.50 | 53 | 67 | 42 | 83 | 63 | 56 |
| ATS-HP-F6L100S47W-308 | 100 | 7.49 | 4 | S | Distilled H ₂ O | 30-120 | 3.50 | 75 | 47 | 60 | 58 | 90 | 39 |
| ATS-HP-F6L150S31W-309 | 150 | 7.49 | 4 | S | Distilled H ₂ O | 30-120 | 3.50 | 113 | 31 | 90 | 39 | 135 | 26 |
| ATS-HP-F6L200S23W-310 | 200 | 7.49 | 4 | S | Distilled H ₂ O | 30-120 | 3.50 | 150 | 23 | 120 | 29 | 180 | 19 |
| ATS-HP-F6L250S19W-311 | 250 | 7.49 | 4 | S | Distilled H ₂ O | 30-120 | 3.50 | 188 | 19 | 150 | 23 | 225 | 16 |
| ATS-HP-F6L300S16W-312 | 300 | 7.49 | 4 | S | Distilled H ₂ O | 30-120 | 3.50 | 225 | 16 | 180 | 19 | 270 | 13 |
| ATS-HP-F6L350S13W-313 | 350 | 7.49 | 4 | S | Distilled H ₂ O | 30-120 | 3.50 | 263 | 13 | 210 | 17 | 315 | 11 |
| ATS-HP-F6L400S12W-314 | 400 | 7.49 | 4 | S | Distilled H ₂ O | 30-120 | 3.50 | 300 | 12 | 240 | 15 | 360 | 10 |
| ATS-HP-F6L70S68W-315 | 70 | 7.35 | 4.3 | S | Distilled H ₂ O | 30-120 | 3.56 | 53 | 68 | 42 | 85 | 63 | 57 |
| ATS-HP-F6L100S47W-316 | 100 | 7.35 | 4.3 | S | Distilled H ₂ O | 30-120 | 3.56 | 75 | 47 | 60 | 59 | 90 | 40 |
| ATS-HP-F6L150S32W-317 | 150 | 7.35 | 4.3 | S | Distilled H ₂ O | 30-120 | 3.56 | 113 | 32 | 90 | 40 | 135 | 26 |
| ATS-HP-F6L200S24W-318 | 200 | 7.35 | 4.3 | S | Distilled H ₂ O | 30-120 | 3.56 | 150 | 24 | 120 | 30 | 180 | 20 |
| ATS-HP-F6L250S19W-319 | 250 | 7.35 | 4.3 | S | Distilled H ₂ O | 30-120 | 3.56 | 188 | 19 | 150 | 24 | 225 | 16 |
| ATS-HP-F6L300S16W-320 | 300 | 7.35 | 4.3 | S | Distilled H ₂ O | 30-120 | 3.56 | 225 | 16 | 180 | 20 | 270 | 13 |
| ATS-HP-F6L350S14W-321 | 350 | 7.35 | 4.3 | S | Distilled H ₂ O | 30-120 | 3.56 | 263 | 14 | 210 | 17 | 315 | 11 |
| ATS-HP-F6L400S12W-322 | 400 | 7.35 | 4.3 | S | Distilled H ₂ O | 30-120 | 3.56 | 300 | 12 | 240 | 15 | 360 | 10 |
| ATS-HP-F6L70S68W-323 | 70 | 7.23 | 4.5 | S | Distilled H ₂ O | 30-120 | 3.59 | 53 | 68 | 42 | 85 | 63 | 57 |
| ATS-HP-F6L100S48W-324 | 100 | 7.23 | 4.5 | S | Distilled H ₂ O | 30-120 | 3.59 | 75 | 48 | 60 | 60 | 90 | 40 |
| ATS-HP-F6L150S32W-325 | 150 | 7.23 | 4.5 | S | Distilled H ₂ O | 30-120 | 3.59 | 113 | 32 | 90 | 40 | 135 | 27 |

Flat Heat Pipes

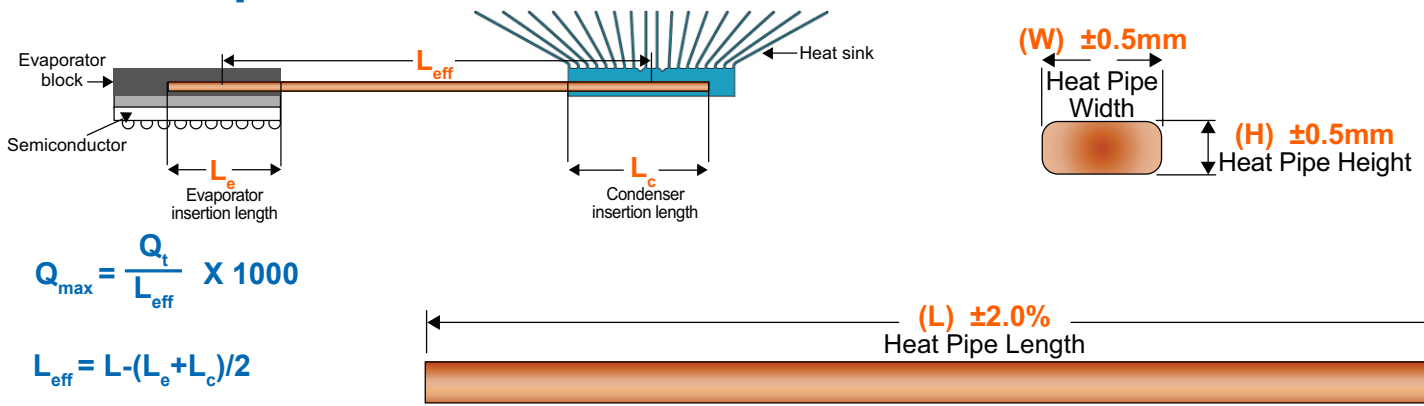


PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{max} (W) | L_{eff} (mm) | Q_{max} (W) | L_{eff} (mm) | Q_{max} (W) |
|-----------------------|-----|------|-----|----|----------------------------|--------|----------|----------------|---------------|----------------|---------------|----------------|---------------|
| ATS-HP-F6L200S24W-326 | 200 | 7.23 | 4.5 | S | Distilled H ₂ O | 30-120 | 3.59 | 150 | 24 | 120 | 30 | 180 | 20 |
| ATS-HP-F6L250S19W-327 | 250 | 7.23 | 4.5 | S | Distilled H ₂ O | 30-120 | 3.59 | 188 | 19 | 150 | 24 | 225 | 16 |
| ATS-HP-F6L300S16W-328 | 300 | 7.23 | 4.5 | S | Distilled H ₂ O | 30-120 | 3.59 | 225 | 16 | 180 | 20 | 270 | 13 |
| ATS-HP-F6L350S14W-329 | 350 | 7.23 | 4.5 | S | Distilled H ₂ O | 30-120 | 3.59 | 263 | 14 | 210 | 17 | 315 | 11 |
| ATS-HP-F6L400S12W-330 | 400 | 7.23 | 4.5 | S | Distilled H ₂ O | 30-120 | 3.59 | 300 | 12 | 240 | 15 | 360 | 10 |
| ATS-HP-F6L70S69W-331 | 70 | 7.07 | 4.8 | S | Distilled H ₂ O | 30-120 | 3.64 | 53 | 69 | 42 | 87 | 63 | 58 |
| ATS-HP-F6L100S49W-332 | 100 | 7.07 | 4.8 | S | Distilled H ₂ O | 30-120 | 3.64 | 75 | 49 | 60 | 61 | 90 | 40 |
| ATS-HP-F6L150S32W-333 | 150 | 7.07 | 4.8 | S | Distilled H ₂ O | 30-120 | 3.64 | 113 | 32 | 90 | 40 | 135 | 27 |
| ATS-HP-F6L200S24W-334 | 200 | 7.07 | 4.8 | S | Distilled H ₂ O | 30-120 | 3.64 | 150 | 24 | 120 | 30 | 180 | 20 |
| ATS-HP-F6L250S19W-335 | 250 | 7.07 | 4.8 | S | Distilled H ₂ O | 30-120 | 3.64 | 188 | 19 | 150 | 24 | 225 | 16 |
| ATS-HP-F6L300S16W-336 | 300 | 7.07 | 4.8 | S | Distilled H ₂ O | 30-120 | 3.64 | 225 | 16 | 180 | 20 | 270 | 13 |
| ATS-HP-F6L350S14W-337 | 350 | 7.07 | 4.8 | S | Distilled H ₂ O | 30-120 | 3.64 | 263 | 14 | 210 | 17 | 315 | 12 |
| ATS-HP-F6L400S12W-338 | 400 | 7.07 | 4.8 | S | Distilled H ₂ O | 30-120 | 3.64 | 300 | 12 | 240 | 15 | 360 | 10 |
| ATS-HP-F6L70S70W-339 | 70 | 6.97 | 5 | S | Distilled H ₂ O | 30-120 | 3.68 | 53 | 70 | 42 | 88 | 63 | 58 |
| ATS-HP-F6L100S49W-340 | 100 | 6.97 | 5 | S | Distilled H ₂ O | 30-120 | 3.68 | 75 | 49 | 60 | 61 | 90 | 41 |
| ATS-HP-F6L150S33W-341 | 150 | 6.97 | 5 | S | Distilled H ₂ O | 30-120 | 3.68 | 113 | 33 | 90 | 41 | 135 | 27 |
| ATS-HP-F6L200S25W-342 | 200 | 6.97 | 5 | S | Distilled H ₂ O | 30-120 | 3.68 | 150 | 25 | 120 | 31 | 180 | 20 |
| ATS-HP-F6L250S20W-343 | 250 | 6.97 | 5 | S | Distilled H ₂ O | 30-120 | 3.68 | 188 | 20 | 150 | 25 | 225 | 16 |
| ATS-HP-F6L300S16W-344 | 300 | 6.97 | 5 | S | Distilled H ₂ O | 30-120 | 3.68 | 225 | 16 | 180 | 20 | 270 | 14 |
| ATS-HP-F6L350S14W-345 | 350 | 6.97 | 5 | S | Distilled H ₂ O | 30-120 | 3.68 | 263 | 14 | 210 | 18 | 315 | 12 |
| ATS-HP-F6L400S12W-346 | 400 | 6.97 | 5 | S | Distilled H ₂ O | 30-120 | 3.68 | 300 | 12 | 240 | 15 | 360 | 10 |
| ATS-HP-F6L70S71W-347 | 70 | 6.77 | 5.3 | S | Distilled H ₂ O | 30-120 | 3.72 | 53 | 71 | 42 | 88 | 63 | 59 |
| ATS-HP-F6L100S50W-348 | 100 | 6.77 | 5.3 | S | Distilled H ₂ O | 30-120 | 3.72 | 75 | 50 | 60 | 62 | 90 | 41 |
| ATS-HP-F6L150S33W-349 | 150 | 6.77 | 5.3 | S | Distilled H ₂ O | 30-120 | 3.72 | 113 | 33 | 90 | 41 | 135 | 28 |
| ATS-HP-F6L200S25W-350 | 200 | 6.77 | 5.3 | S | Distilled H ₂ O | 30-120 | 3.72 | 150 | 25 | 120 | 31 | 180 | 21 |

Flat Heat Pipes

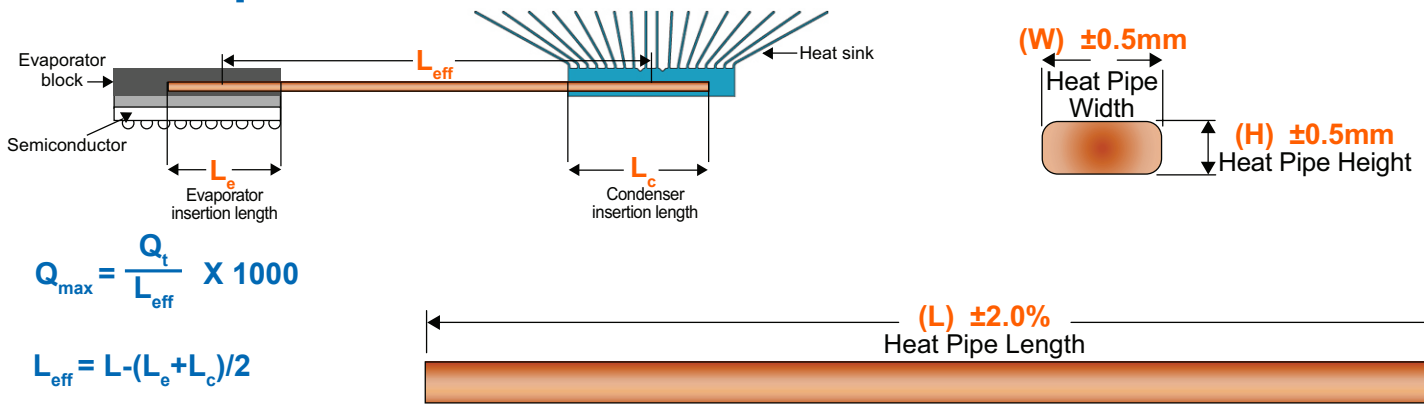


PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) |
|-----------------------|-----|-------|-----|----|----------------------------|--------|----------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| ATS-HP-F6L250S20W-351 | 250 | 6.77 | 5.3 | S | Distilled H ₂ O | 30-120 | 3.72 | 188 | 20 | 150 | 25 | 225 | 17 |
| ATS-HP-F6L300S17W-352 | 300 | 6.77 | 5.3 | S | Distilled H ₂ O | 30-120 | 3.72 | 225 | 17 | 180 | 21 | 270 | 14 |
| ATS-HP-F6L350S14W-353 | 350 | 6.77 | 5.3 | S | Distilled H ₂ O | 30-120 | 3.72 | 263 | 14 | 210 | 18 | 315 | 12 |
| ATS-HP-F6L400S12W-354 | 400 | 6.77 | 5.3 | S | Distilled H ₂ O | 30-120 | 3.72 | 300 | 12 | 240 | 15 | 360 | 10 |
| ATS-HP-F8L75S76W-355 | 75 | 11.41 | 2.5 | S | Distilled H ₂ O | 30-120 | 4.26 | 56 | 76 | 45 | 95 | 68 | 63 |
| ATS-HP-F8L150S38W-356 | 150 | 11.41 | 2.5 | S | Distilled H ₂ O | 30-120 | 4.26 | 113 | 38 | 90 | 47 | 135 | 32 |
| ATS-HP-F8L200S28W-357 | 200 | 11.41 | 2.5 | S | Distilled H ₂ O | 30-120 | 4.26 | 150 | 28 | 120 | 36 | 180 | 24 |
| ATS-HP-F8L250S23W-358 | 250 | 11.41 | 2.5 | S | Distilled H ₂ O | 30-120 | 4.26 | 188 | 23 | 150 | 28 | 225 | 19 |
| ATS-HP-F8L300S19W-359 | 300 | 11.41 | 2.5 | S | Distilled H ₂ O | 30-120 | 4.26 | 225 | 19 | 180 | 24 | 270 | 16 |
| ATS-HP-F8L350S16W-360 | 350 | 11.41 | 2.5 | S | Distilled H ₂ O | 30-120 | 4.26 | 263 | 16 | 210 | 20 | 315 | 14 |
| ATS-HP-F8L400S14W-361 | 400 | 11.41 | 2.5 | S | Distilled H ₂ O | 30-120 | 4.26 | 300 | 14 | 240 | 18 | 360 | 12 |
| ATS-HP-F8L450S13W-362 | 450 | 11.41 | 2.5 | S | Distilled H ₂ O | 30-120 | 4.26 | 338 | 13 | 270 | 16 | 405 | 11 |
| ATS-HP-F8L500S11W-363 | 500 | 11.41 | 2.5 | S | Distilled H ₂ O | 30-120 | 4.26 | 375 | 11 | 300 | 14 | 450 | 9 |
| ATS-HP-F8L75S79W-364 | 75 | 11.25 | 3 | S | Distilled H ₂ O | 30-120 | 4.45 | 56 | 79 | 45 | 99 | 68 | 66 |
| ATS-HP-F8L150S40W-365 | 150 | 11.25 | 3 | S | Distilled H ₂ O | 30-120 | 4.45 | 113 | 40 | 90 | 49 | 135 | 33 |
| ATS-HP-F8L200S30W-366 | 200 | 11.25 | 3 | S | Distilled H ₂ O | 30-120 | 4.45 | 150 | 30 | 120 | 37 | 180 | 25 |
| ATS-HP-F8L250S24W-367 | 250 | 11.25 | 3 | S | Distilled H ₂ O | 30-120 | 4.45 | 188 | 24 | 150 | 30 | 225 | 20 |
| ATS-HP-F8L300S20W-368 | 300 | 11.25 | 3 | S | Distilled H ₂ O | 30-120 | 4.45 | 225 | 20 | 180 | 25 | 270 | 16 |
| ATS-HP-F8L350S17W-369 | 350 | 11.25 | 3 | S | Distilled H ₂ O | 30-120 | 4.45 | 263 | 17 | 210 | 21 | 315 | 14 |
| ATS-HP-F8L400S15W-370 | 400 | 11.25 | 3 | S | Distilled H ₂ O | 30-120 | 4.45 | 300 | 15 | 240 | 19 | 360 | 12 |
| ATS-HP-F8L450S13W-371 | 450 | 11.25 | 3 | S | Distilled H ₂ O | 30-120 | 4.45 | 338 | 13 | 270 | 16 | 405 | 11 |
| ATS-HP-F8L500S12W-372 | 500 | 11.25 | 3 | S | Distilled H ₂ O | 30-120 | 4.45 | 375 | 12 | 300 | 15 | 450 | 10 |
| ATS-HP-F8L75S79W-373 | 75 | 11.05 | 3.2 | S | Distilled H ₂ O | 30-120 | 4.46 | 56 | 79 | 45 | 99 | 68 | 66 |
| ATS-HP-F8L150S40W-374 | 150 | 11.05 | 3.2 | S | Distilled H ₂ O | 30-120 | 4.46 | 113 | 40 | 90 | 50 | 135 | 33 |
| ATS-HP-F8L200S30W-375 | 200 | 11.05 | 3.2 | S | Distilled H ₂ O | 30-120 | 4.46 | 150 | 30 | 120 | 37 | 180 | 25 |

Flat Heat Pipes

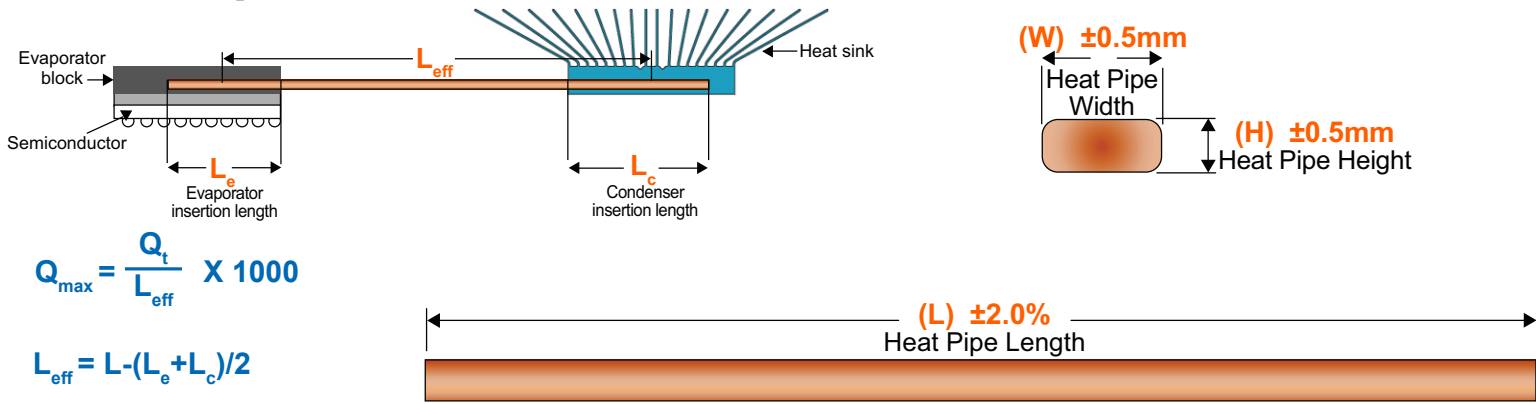


PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L _{eff} (mm) | Q _{max} (W) | L _{eff} (mm) | Q _{max} (W) | L _{eff} (mm) | Q _{max} (W) |
|-----------------------|-----|-------|-----|----|----------------------------|--------|----------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| ATS-HP-F8L250S24W-376 | 250 | 11.05 | 3.2 | S | Distilled H ₂ O | 30-120 | 4.46 | 188 | 24 | 150 | 30 | 225 | 20 |
| ATS-HP-F8L300S20W-377 | 300 | 11.05 | 3.2 | S | Distilled H ₂ O | 30-120 | 4.46 | 225 | 20 | 180 | 25 | 270 | 17 |
| ATS-HP-F8L350S17W-378 | 350 | 11.05 | 3.2 | S | Distilled H ₂ O | 30-120 | 4.46 | 263 | 17 | 210 | 21 | 315 | 14 |
| ATS-HP-F8L400S15W-379 | 400 | 11.05 | 3.2 | S | Distilled H ₂ O | 30-120 | 4.46 | 300 | 15 | 240 | 19 | 360 | 12 |
| ATS-HP-F8L450S13W-380 | 450 | 11.05 | 3.2 | S | Distilled H ₂ O | 30-120 | 4.46 | 338 | 13 | 270 | 17 | 405 | 11 |
| ATS-HP-F8L500S12W-381 | 500 | 11.05 | 3.2 | S | Distilled H ₂ O | 30-120 | 4.46 | 375 | 12 | 300 | 15 | 450 | 10 |
| ATS-HP-F8L75S80W-382 | 75 | 10.86 | 3.5 | S | Distilled H ₂ O | 30-120 | 4.51 | 56 | 80 | 45 | 100 | 68 | 67 |
| ATS-HP-F8L150S40W-383 | 150 | 10.86 | 3.5 | S | Distilled H ₂ O | 30-120 | 4.51 | 113 | 40 | 90 | 50 | 135 | 33 |
| ATS-HP-F8L200S30W-384 | 200 | 10.86 | 3.5 | S | Distilled H ₂ O | 30-120 | 4.51 | 150 | 30 | 120 | 38 | 180 | 25 |
| ATS-HP-F8L250S24W-385 | 250 | 10.86 | 3.5 | S | Distilled H ₂ O | 30-120 | 4.51 | 188 | 24 | 150 | 30 | 225 | 20 |
| ATS-HP-F8L300S20W-386 | 300 | 10.86 | 3.5 | S | Distilled H ₂ O | 30-120 | 4.51 | 225 | 20 | 180 | 25 | 270 | 17 |
| ATS-HP-F8L350S17W-387 | 350 | 10.86 | 3.5 | S | Distilled H ₂ O | 30-120 | 4.51 | 263 | 17 | 210 | 21 | 315 | 14 |
| ATS-HP-F8L400S15W-388 | 400 | 10.86 | 3.5 | S | Distilled H ₂ O | 30-120 | 4.51 | 300 | 15 | 240 | 19 | 360 | 13 |
| ATS-HP-F8L450S13W-389 | 450 | 10.86 | 3.5 | S | Distilled H ₂ O | 30-120 | 4.51 | 338 | 13 | 270 | 17 | 405 | 11 |
| ATS-HP-F8L500S12W-390 | 500 | 10.86 | 3.5 | S | Distilled H ₂ O | 30-120 | 4.51 | 375 | 12 | 300 | 15 | 450 | 10 |
| ATS-HP-F8L75S82W-391 | 75 | 10.86 | 3.8 | S | Distilled H ₂ O | 30-120 | 4.62 | 56 | 82 | 45 | 103 | 68 | 69 |
| ATS-HP-F8L150S41W-392 | 150 | 10.86 | 3.8 | S | Distilled H ₂ O | 30-120 | 4.62 | 113 | 41 | 90 | 51 | 135 | 34 |
| ATS-HP-F8L200S31W-393 | 200 | 10.86 | 3.8 | S | Distilled H ₂ O | 30-120 | 4.62 | 150 | 31 | 120 | 39 | 180 | 26 |
| ATS-HP-F8L250S25W-394 | 250 | 10.86 | 3.8 | S | Distilled H ₂ O | 30-120 | 4.62 | 188 | 25 | 150 | 31 | 225 | 21 |
| ATS-HP-F8L300S21W-395 | 300 | 10.86 | 3.8 | S | Distilled H ₂ O | 30-120 | 4.62 | 225 | 21 | 180 | 26 | 270 | 17 |
| ATS-HP-F8L350S18W-396 | 350 | 10.86 | 3.8 | S | Distilled H ₂ O | 30-120 | 4.62 | 263 | 18 | 210 | 22 | 315 | 15 |
| ATS-HP-F8L400S15W-397 | 400 | 10.86 | 3.8 | S | Distilled H ₂ O | 30-120 | 4.62 | 300 | 15 | 240 | 19 | 360 | 13 |
| ATS-HP-F8L450S14W-398 | 450 | 10.86 | 3.8 | S | Distilled H ₂ O | 30-120 | 4.62 | 338 | 14 | 270 | 17 | 405 | 11 |

Flat Heat Pipes



$$Q_{\max} = \frac{Q_t}{L_{\text{eff}}} \times 1000$$

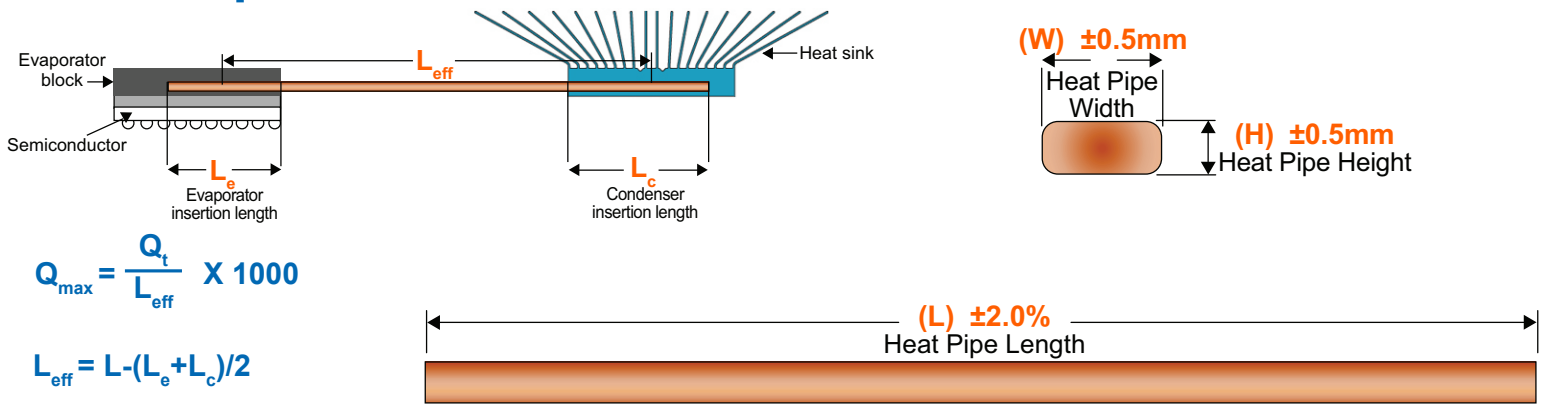
$$L_{\text{eff}} = L - (L_e + L_c) / 2$$

PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) |
|-----------------------|-----|-------|-----|----|----------------------------|--------|----------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| ATS-HP-F8L500S12W-399 | 500 | 10.86 | 3.8 | S | Distilled H ₂ O | 30-120 | 4.62 | 375 | 12 | 300 | 15 | 450 | 10 |
| ATS-HP-F8L75S82W-400 | 75 | 10.65 | 4 | S | Distilled H ₂ O | 30-120 | 4.62 | 56 | 82 | 45 | 103 | 68 | 69 |
| ATS-HP-F8L150S41W-401 | 150 | 10.65 | 4 | S | Distilled H ₂ O | 30-120 | 4.62 | 113 | 41 | 90 | 51 | 135 | 34 |
| ATS-HP-F8L200S31W-402 | 200 | 10.65 | 4 | S | Distilled H ₂ O | 30-120 | 4.62 | 150 | 31 | 120 | 39 | 180 | 26 |
| ATS-HP-F8L250S25W-403 | 250 | 10.65 | 4 | S | Distilled H ₂ O | 30-120 | 4.62 | 188 | 25 | 150 | 31 | 225 | 21 |
| ATS-HP-F8L300S21W-404 | 300 | 10.65 | 4 | S | Distilled H ₂ O | 30-120 | 4.62 | 225 | 21 | 180 | 26 | 270 | 17 |
| ATS-HP-F8L350S18W-405 | 350 | 10.65 | 4 | S | Distilled H ₂ O | 30-120 | 4.62 | 263 | 18 | 210 | 22 | 315 | 15 |
| ATS-HP-F8L400S15W-406 | 400 | 10.65 | 4 | S | Distilled H ₂ O | 30-120 | 4.62 | 300 | 15 | 240 | 19 | 360 | 13 |
| ATS-HP-F8L450S14W-407 | 450 | 10.65 | 4 | S | Distilled H ₂ O | 30-120 | 4.62 | 338 | 14 | 270 | 17 | 405 | 11 |
| ATS-HP-F8L500S12W-408 | 500 | 10.65 | 4 | S | Distilled H ₂ O | 30-120 | 4.62 | 375 | 12 | 300 | 15 | 450 | 10 |
| ATS-HP-F8L75S83W-409 | 75 | 10.6 | 4.2 | S | Distilled H ₂ O | 30-120 | 4.68 | 56 | 83 | 45 | 104 | 68 | 69 |
| ATS-HP-F8L150S42W-410 | 150 | 10.6 | 4.2 | S | Distilled H ₂ O | 30-120 | 4.68 | 113 | 42 | 90 | 52 | 135 | 35 |
| ATS-HP-F8L200S31W-411 | 200 | 10.6 | 4.2 | S | Distilled H ₂ O | 30-120 | 4.68 | 150 | 31 | 120 | 39 | 180 | 26 |
| ATS-HP-F8L250S25W-412 | 250 | 10.6 | 4.2 | S | Distilled H ₂ O | 30-120 | 4.68 | 188 | 25 | 150 | 31 | 225 | 21 |
| ATS-HP-F8L300S21W-413 | 300 | 10.6 | 4.2 | S | Distilled H ₂ O | 30-120 | 4.68 | 225 | 21 | 180 | 26 | 270 | 17 |
| ATS-HP-F8L350S18W-414 | 350 | 10.6 | 4.2 | S | Distilled H ₂ O | 30-120 | 4.68 | 263 | 18 | 210 | 22 | 315 | 15 |
| ATS-HP-F8L400S16W-415 | 400 | 10.6 | 4.2 | S | Distilled H ₂ O | 30-120 | 4.68 | 300 | 16 | 240 | 20 | 360 | 13 |
| ATS-HP-F8L450S14W-416 | 450 | 10.6 | 4.2 | S | Distilled H ₂ O | 30-120 | 4.68 | 338 | 14 | 270 | 17 | 405 | 12 |
| ATS-HP-F8L500S12W-417 | 500 | 10.6 | 4.2 | S | Distilled H ₂ O | 30-120 | 4.68 | 375 | 12 | 300 | 16 | 450 | 10 |
| ATS-HP-F8L75S84W-418 | 75 | 10.35 | 4.5 | S | Distilled H ₂ O | 30-120 | 4.70 | 56 | 84 | 45 | 104 | 68 | 70 |
| ATS-HP-F8L150S42W-419 | 150 | 10.35 | 4.5 | S | Distilled H ₂ O | 30-120 | 4.70 | 113 | 42 | 90 | 52 | 135 | 35 |
| ATS-HP-F8L200S31W-420 | 200 | 10.35 | 4.5 | S | Distilled H ₂ O | 30-120 | 4.70 | 150 | 31 | 120 | 39 | 180 | 26 |
| ATS-HP-F8L250S25W-421 | 250 | 10.35 | 4.5 | S | Distilled H ₂ O | 30-120 | 4.70 | 188 | 25 | 150 | 31 | 225 | 21 |
| ATS-HP-F8L300S21W-422 | 300 | 10.35 | 4.5 | S | Distilled H ₂ O | 30-120 | 4.70 | 225 | 21 | 180 | 26 | 270 | 17 |
| ATS-HP-F8L350S18W-423 | 350 | 10.35 | 4.5 | S | Distilled H ₂ O | 30-120 | 4.70 | 263 | 18 | 210 | 22 | 315 | 15 |

Flat Heat Pipes

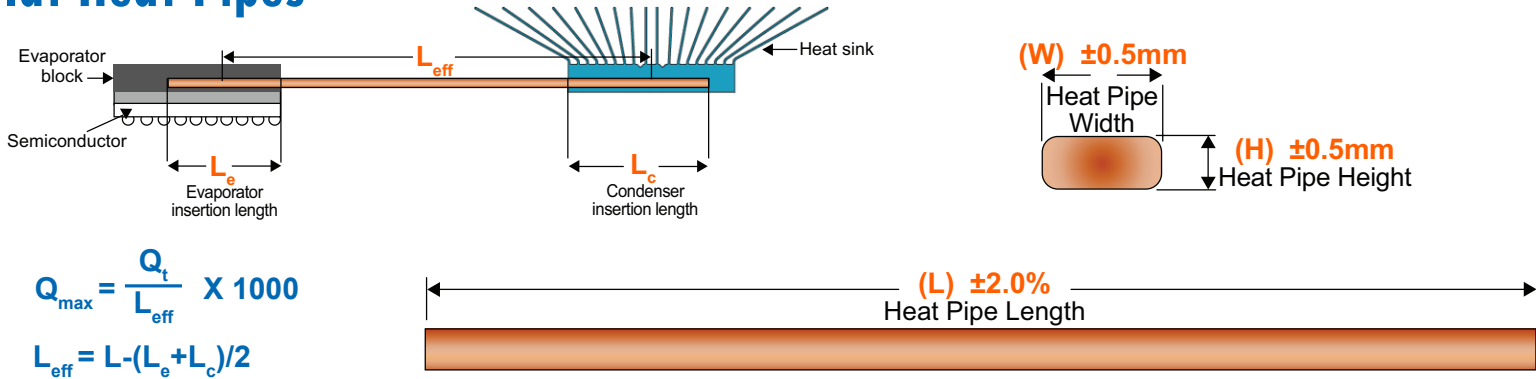


PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) | L_{eff} (mm) | Q_{\max} (W) |
|-----------------------|-----|-------|-----|----|----------------------------|--------|----------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|
| ATS-HP-F8L400S16W-424 | 400 | 10.35 | 4.5 | S | Distilled H ₂ O | 30-120 | 4.70 | 300 | 16 | 240 | 20 | 360 | 13 |
| ATS-HP-F8L450S14W-425 | 450 | 10.35 | 4.5 | S | Distilled H ₂ O | 30-120 | 4.70 | 338 | 14 | 270 | 17 | 405 | 12 |
| ATS-HP-F8L500S13W-426 | 500 | 10.35 | 4.5 | S | Distilled H ₂ O | 30-120 | 4.70 | 375 | 13 | 300 | 16 | 450 | 10 |
| ATS-HP-F8L75S85W-427 | 75 | 10.31 | 4.7 | S | Distilled H ₂ O | 30-120 | 4.76 | 56 | 85 | 45 | 106 | 68 | 71 |
| ATS-HP-F8L150S42W-428 | 150 | 10.31 | 4.7 | S | Distilled H ₂ O | 30-120 | 4.76 | 113 | 42 | 90 | 53 | 135 | 35 |
| ATS-HP-F8L200S32W-429 | 200 | 10.31 | 4.7 | S | Distilled H ₂ O | 30-120 | 4.76 | 150 | 32 | 120 | 40 | 180 | 26 |
| ATS-HP-F8L250S25W-430 | 250 | 10.31 | 4.7 | S | Distilled H ₂ O | 30-120 | 4.76 | 188 | 25 | 150 | 32 | 225 | 21 |
| ATS-HP-F8L300S21W-431 | 300 | 10.31 | 4.7 | S | Distilled H ₂ O | 30-120 | 4.76 | 225 | 21 | 180 | 26 | 270 | 18 |
| ATS-HP-F8L350S18W-432 | 350 | 10.31 | 4.7 | S | Distilled H ₂ O | 30-120 | 4.76 | 263 | 18 | 210 | 23 | 315 | 15 |
| ATS-HP-F8L400S16W-433 | 400 | 10.31 | 4.7 | S | Distilled H ₂ O | 30-120 | 4.76 | 300 | 16 | 240 | 20 | 360 | 13 |
| ATS-HP-F8L450S14W-434 | 450 | 10.31 | 4.7 | S | Distilled H ₂ O | 30-120 | 4.76 | 338 | 14 | 270 | 18 | 405 | 12 |
| ATS-HP-F8L500S13W-435 | 500 | 10.31 | 4.7 | S | Distilled H ₂ O | 30-120 | 4.76 | 375 | 13 | 300 | 16 | 450 | 11 |
| ATS-HP-F8L75S85W-436 | 75 | 10.11 | 5 | S | Distilled H ₂ O | 30-120 | 4.80 | 56 | 85 | 45 | 107 | 68 | 71 |
| ATS-HP-F8L150S43W-437 | 150 | 10.11 | 5 | S | Distilled H ₂ O | 30-120 | 4.80 | 113 | 43 | 90 | 53 | 135 | 36 |
| ATS-HP-F8L200S32W-438 | 200 | 10.11 | 5 | S | Distilled H ₂ O | 30-120 | 4.80 | 150 | 32 | 120 | 40 | 180 | 27 |
| ATS-HP-F8L250S26W-439 | 250 | 10.11 | 5 | S | Distilled H ₂ O | 30-120 | 4.80 | 188 | 26 | 150 | 32 | 225 | 21 |
| ATS-HP-F8L300S21W-440 | 300 | 10.11 | 5 | S | Distilled H ₂ O | 30-120 | 4.80 | 225 | 21 | 180 | 27 | 270 | 18 |
| ATS-HP-F8L350S18W-441 | 350 | 10.11 | 5 | S | Distilled H ₂ O | 30-120 | 4.80 | 263 | 18 | 210 | 23 | 315 | 15 |
| ATS-HP-F8L400S16W-442 | 400 | 10.11 | 5 | S | Distilled H ₂ O | 30-120 | 4.80 | 300 | 16 | 240 | 20 | 360 | 13 |
| ATS-HP-F8L450S14W-443 | 450 | 10.11 | 5 | S | Distilled H ₂ O | 30-120 | 4.80 | 338 | 14 | 270 | 18 | 405 | 12 |
| ATS-HP-F8L500S13W-444 | 500 | 10.11 | 5 | S | Distilled H ₂ O | 30-120 | 4.80 | 375 | 13 | 300 | 16 | 450 | 11 |
| ATS-HP-F8L75S88W-445 | 75 | 9.6 | 6 | S | Distilled H ₂ O | 30-120 | 4.98 | 56 | 88 | 45 | 111 | 68 | 74 |
| ATS-HP-F8L150S44W-446 | 150 | 9.6 | 6 | S | Distilled H ₂ O | 30-120 | 4.98 | 113 | 44 | 90 | 55 | 135 | 37 |
| ATS-HP-F8L200S33W-447 | 200 | 9.6 | 6 | S | Distilled H ₂ O | 30-120 | 4.98 | 150 | 33 | 120 | 41 | 180 | 28 |
| ATS-HP-F8L250S27W-448 | 250 | 9.6 | 6 | S | Distilled H ₂ O | 30-120 | 4.98 | 188 | 27 | 150 | 33 | 225 | 22 |

Flat Heat Pipes



PRODUCT SPECIFICATIONS

L=Length (mm); W=Width (mm); H=Height (mm); WT=Wick Type (S=Sintered, G=Grooved); WF=Working Fluid; TR= Temperature Range (°C)

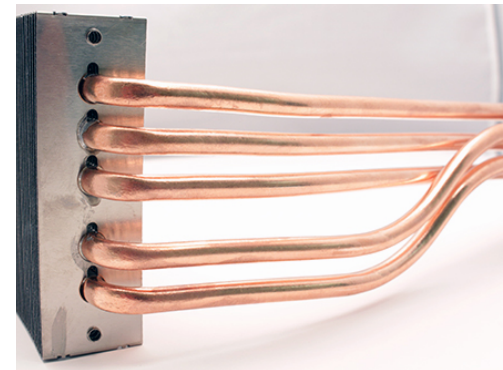
| Part Number | L | W | H | WT | WF | TR | QT (W·m) | L _{eff} (mm) | Q _{max} (W) | L _{eff} (mm) | Q _{max} (W) | L _{eff} (mm) | Q _{max} (W) |
|-----------------------|-----|------|-----|----|----------------------------|--------|----------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| ATS-HP-F8L300S22W-449 | 300 | 9.6 | 6 | S | Distilled H ₂ O | 30-120 | 4.98 | 225 | 22 | 180 | 28 | 270 | 18 |
| ATS-HP-F8L350S19W-450 | 350 | 9.6 | 6 | S | Distilled H ₂ O | 30-120 | 4.98 | 263 | 19 | 210 | 24 | 315 | 16 |
| ATS-HP-F8L400S17W-451 | 400 | 9.6 | 6 | S | Distilled H ₂ O | 30-120 | 4.98 | 300 | 17 | 240 | 21 | 360 | 14 |
| ATS-HP-F8L450S15W-452 | 450 | 9.6 | 6 | S | Distilled H ₂ O | 30-120 | 4.98 | 338 | 15 | 270 | 18 | 405 | 12 |
| ATS-HP-F8L500S13W-453 | 500 | 9.6 | 6 | S | Distilled H ₂ O | 30-120 | 4.98 | 375 | 13 | 300 | 17 | 450 | 11 |
| ATS-HP-F8L75S91W-454 | 75 | 9.45 | 6.5 | S | Distilled H ₂ O | 30-120 | 5.10 | 56 | 91 | 45 | 113 | 68 | 76 |
| ATS-HP-F8L150S45W-455 | 150 | 9.45 | 6.5 | S | Distilled H ₂ O | 30-120 | 5.10 | 113 | 45 | 90 | 57 | 135 | 38 |
| ATS-HP-F8L200S34W-456 | 200 | 9.45 | 6.5 | S | Distilled H ₂ O | 30-120 | 5.10 | 150 | 34 | 120 | 43 | 180 | 28 |
| ATS-HP-F8L250S27W-457 | 250 | 9.45 | 6.5 | S | Distilled H ₂ O | 30-120 | 5.10 | 188 | 27 | 150 | 34 | 225 | 23 |
| ATS-HP-F8L300S23W-458 | 300 | 9.45 | 6.5 | S | Distilled H ₂ O | 30-120 | 5.10 | 225 | 23 | 180 | 28 | 270 | 19 |
| ATS-HP-F8L350S19W-459 | 350 | 9.45 | 6.5 | S | Distilled H ₂ O | 30-120 | 5.10 | 263 | 19 | 210 | 24 | 315 | 16 |
| ATS-HP-F8L400S17W-460 | 400 | 9.45 | 6.5 | S | Distilled H ₂ O | 30-120 | 5.10 | 300 | 17 | 240 | 21 | 360 | 14 |
| ATS-HP-F8L450S15W-461 | 450 | 9.45 | 6.5 | S | Distilled H ₂ O | 30-120 | 5.10 | 338 | 15 | 270 | 19 | 405 | 13 |
| ATS-HP-F8L500S14W-462 | 500 | 9.45 | 6.5 | S | Distilled H ₂ O | 30-120 | 5.10 | 375 | 14 | 300 | 17 | 450 | 11 |

SUGGESTED MINIMUM BEND RADIUS ON ATS HEAT PIPES

| Heat Pipe Diameter in mm | Minimum Bend Radius in mm |
|--------------------------|---------------------------|
| 4 | 12 |
| 5 | 15 |
| 6 | 18 |
| 7 | 21 |
| 8 | 24 |

HEAT PIPE JOINING TECHNIQUES

- 1) For small batches/prototypes, heat pipes can be joined to heat sinks or other pieces with thermal epoxy.
- 2) For optimal results, heat pipes should be soldered using low temperature solder at temperatures above 139°C but no greater than 250°C.



For further technical information, please contact Advanced Thermal Solutions, Inc. by phone: **1-781-769-2800**, email ats-hq@qats.com or visit www.qats.com.