

# SynJet<sup>®</sup> Low Profile Cooler with HS

## Features/Benefits

- Covers all your Low Profile Chip cooling needs
  - Thermal loads from 10 to nearly 20W
  - Low acoustic sound sensitive applications
  - Ultra-low power
- Very low profile applications
- 100K hours L10 life at 60C



## Overview

SynJet<sup>®</sup> fan-less air moving technology provides the most reliable active cooling solution available today. The Low Profile family of SynJet<sup>®</sup> cooling modules has been developed by Nuventix Inc. to be integrated with a wide array of thermal needs.

## Specifications

Parameter	$\Theta_{s-a}$ <sup>123</sup>	SPL (dBA) <sup>4</sup>	TDP <sup>5</sup> (W)	Power W (5V) <sup>6</sup>
Low Profile – High Performance, 19W Cooler	2.1	30	19	0.80
Low Profile – Standard, 15W Cooler	2.7	25	15	0.60
Low Profile – Low Power, 12W Cooler	3.25	23	12	0.20
Low Profile – Silent, 10W Cooler	4.0	17	10	0.40

Parameter – All Modules	Min	Typ	Max	Units	Conditions
Voltage <sup>6</sup>	4.75		5.25	VDC	150mV max ripple p-p
Power Lead					Power (Red wire) Ground (Black wire)
Operating Temperature	0		60	°C	
Storage Temperature	-40		75	°C	
Storage Altitude			15K	m	Above Sea Level
Relative Humidity (operating)	5		95	%	Non-condensing
Weight			125	gr	
Agency Certifications					CE, UL , RoHS
Reliability <sup>7</sup>			100K	hrs	L10 @ 60°C

<sup>1</sup> In fully open air or well vented fixtures from 25C to 60C in full on condition with Cu heatsink. Thermal data is given as a reference only. Actual performance may vary by application.

<sup>2</sup> Thermal resistance is measured from the bottom middle of the heat sink, with a heat source at least 15cm<sup>2</sup>, to ambient air measured at the inlet to the SynJet.

<sup>3</sup> SynJet Cooler is suitable for enclosed fixtures but thermal performance will vary depending on the enclosure.

<sup>4</sup> Per ISO 7779

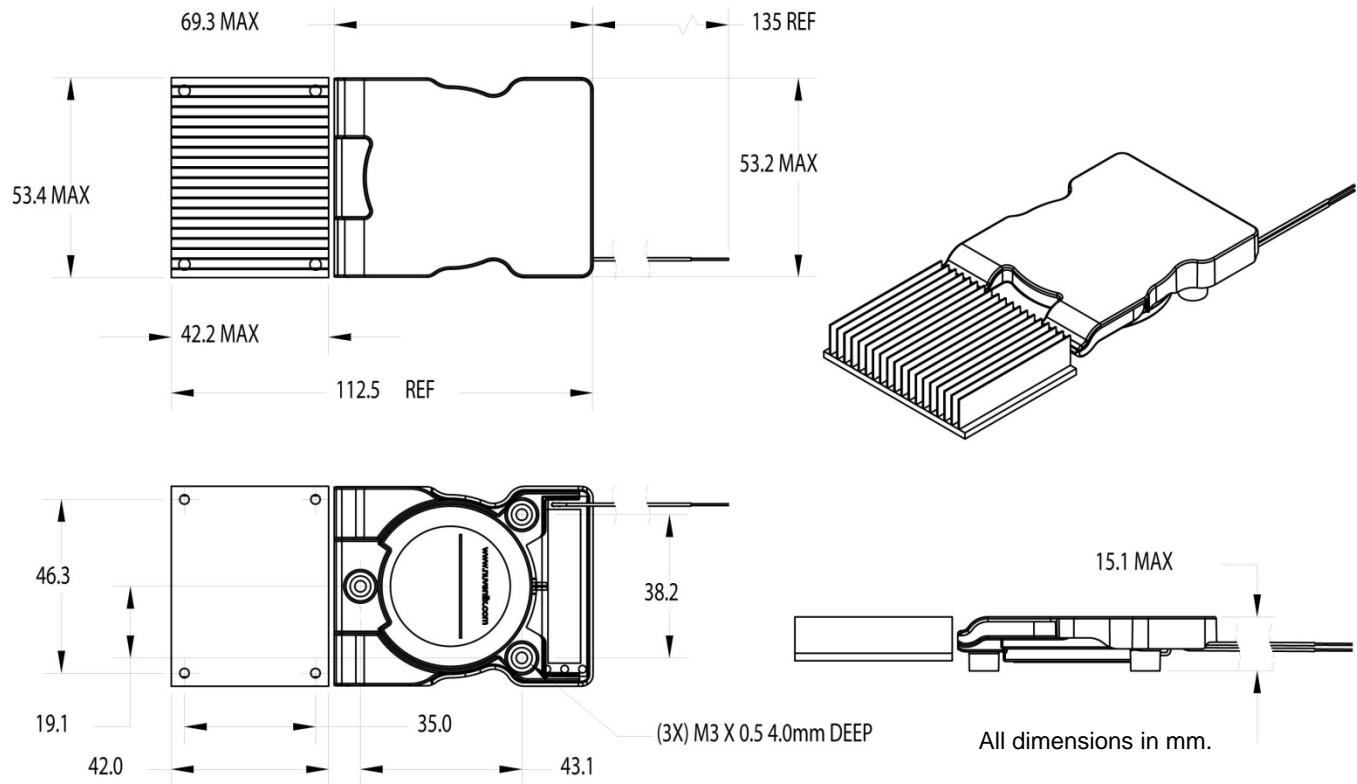
<sup>5</sup> Total Design Power based on a 40°C delta in temperature.

<sup>6</sup> See Nuventix Design Guide for detailed power requirements.

<sup>7</sup> L10 is the life for which 90% of a group of modules will exceed the specified life.

# PRODUCT

## Mechanical drawing



## Part Numbers

Low Profile Cooler	Document revision: 2.3
SSCCS-CM005-008	SynJet, Low Profile Chip Cooler 5v – HP, 19W Cooler
SSCCS-CM005-001	SynJet, Low Profile Chip Cooler 5v – Standard, 15W Cooler
SSCCS-CM005-009	SynJet, Low Profile Chip Cooler 5v – LA, 12W Cooler
SSCCS-CM005-010	SynJet, Low Profile Chip Cooler 5v – S, 10W Cooler
HSCCS-CALCL-001	Low Profile Chip Cooler Heatsink, Al
HSCCS-CCUCL-001	Low Profile Chip Cooler Heatsink, Cu

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