

SynJet[®] Top Mount Chip Cooler with HS

Features/Benefits

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



Overview

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

Specifications

Parameter	Θs-a ^{1,2,3}	SPL (dBA) ⁴	TDP ⁵ (W)	Power W (5V) ⁶
Top Mount – High Performance, 19W Cooler	2.1	35	19	1.1
Top Mount – Standard, 13W Cooler	3	25	13	0.9
Top Mount – Low Power, 11W Cooler	3.5	22	11.5	0.5
Top Mount – Silent, 10W Cooler	4	19	10	0.7

Parameter – All Modules	Min	Typ	Max	Units	Conditions
Voltage ⁶	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			10K	m	Above Sea Level
Relative Humidity (operating)	5		95	%	Non-condensing
Weight			155	gr	With Cu heat sink
Agency Certifications					CE, UL, RoHS
Reliability ⁷			100K	hrs	L10 @ 60C

¹ In fully open air or well vented fixtures from 25C to 50C in full on condition. Thermal data is given as a reference only. Actual performance may vary by application.

² Thermal resistance is measured from the bottom middle of the heat sink, with a heat source at least 15cm², to ambient air measured at the inlet to the SynJet.

³ SynJet Cooler is suitable for enclosed fixtures but thermal performance will vary depending on the enclosure

⁴ Per ISO 7779

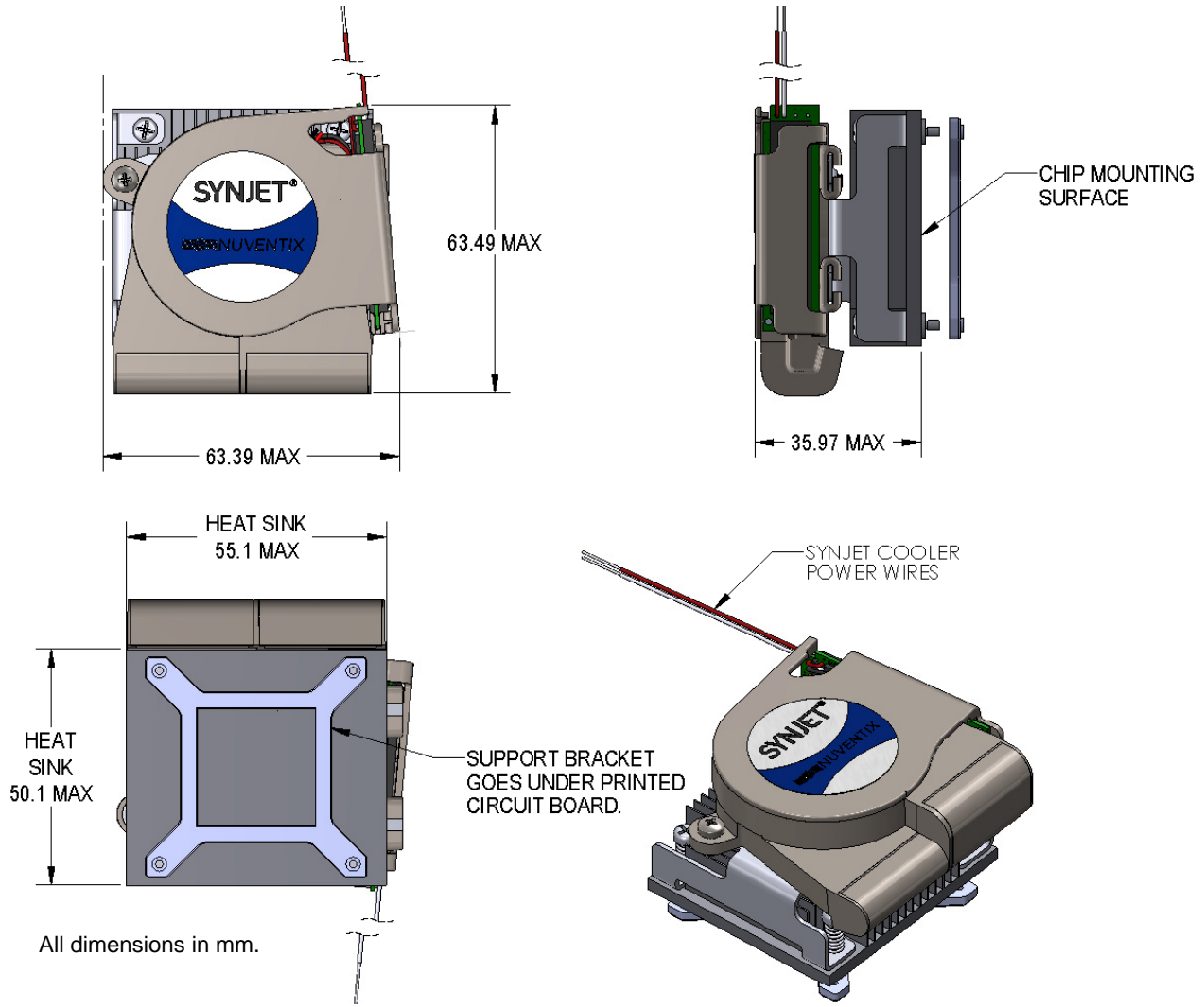
⁵ Total Design Power based on a 40°C delta in temperature

⁶ See Nuventix Design Guide for detailed power requirements

⁷ L10 is the life for which 90% of a group of modules will exceed the specified life

PRODUCT

Mechanical drawing



Part Numbers

Top Mount	Document revision: 2.5
STPMS-CM005-007	SynJet, Top Mount Chip Cooler 5v – HP 19W, Cooler
STPMS-CM005-001	SynJet, Top Mount Chip Cooler 5v – Standard, 13W Cooler
STPMS-CM005-009	SynJet, Top Mount Chip Cooler 5v – LP 11W, Cooler
STPMS-CM005-008	SynJet, Top Mount Chip Cooler 5v – S 10W, Cooler
HTPMS-CALCL-001	Top Mount Chip Cooler, Heatsink, Al
HTPMS-CCUCL-001	Top Mount Chip Cooler, Heatsink, Cu

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