

SynJet[®] 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[®] 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	Θ_{s-a} ^{1,2,3}	SPL (dBA) ⁴	TDP ⁵ (W)	Power W (5V) ⁶
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 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			15K	m	Above Sea Level
Relative Humidity (operating)	5		95	%	Non-condensing
Weight			125	gr	
Agency Certifications					CE, UL , RoHS
Reliability ⁷			100K	hrs	L10 @ 60°C

¹ 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.

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

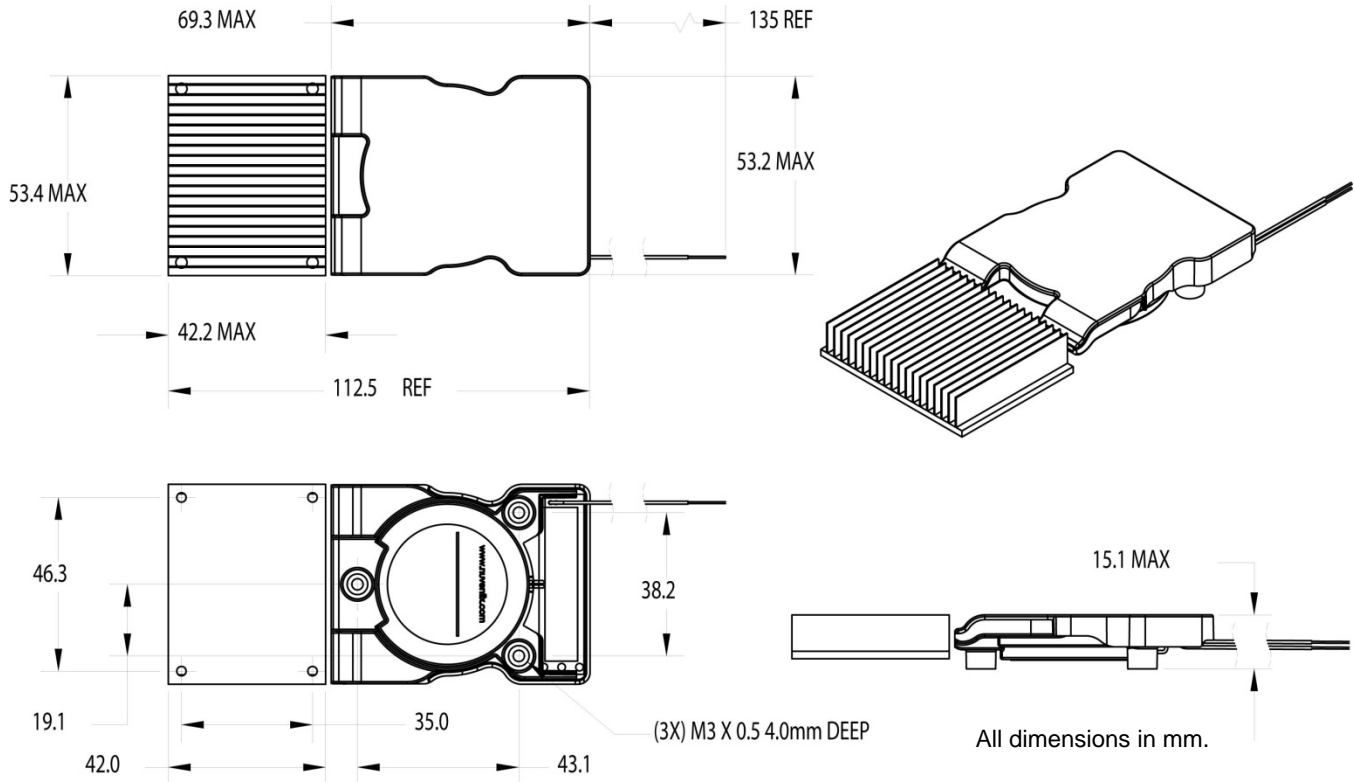
⁵ Total Design Power based on a 40°C delta in temperature.

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

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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