

SynJet[®] MR16 LED Cooler w/HS

Features/Benefits

- Cools 15W
- < 22 dBA of sound
- Meets MR-16 form factor
- 100k hours L10 life at 50C



Overview

SynJet[®] fan-less air moving technology provides the most reliable active cooling solution available today. The SM16S-CM005-002 is a SynJet[®] cooling module developed by Nuventix Inc. One typical application is cooling a 15W heat source, with a 40C delta T, in an LED lighting application. It is designed to fit into the diameter of an MR-16 bulb socket.

Specifications

Parameter	Min	Typ	Max	Units	Conditions
Θ_{s-a} ¹²³		2.67		°C/W	In fully open air or well vented fixtures from 25C to 50C
Total Design Power			15	W	At max operating temperature
Sound Pressure Level ⁴		22		dBA	At 1 meter
Voltage	4.75		5.25	VDC	150mV max ripple p-p; 12VDC option available
Power			800	mW	
Power Lead					Pin 1: Power (Red wire) Pin 2: Ground (Black wire)
Operating Temperature	0		50	°C	
Storage Temperature	-40		85	°C	
Storage Altitude			15K	m	Above Sea Level
Relative Humidity (operating)	5		95	%	Non-condensing
Weight			120	gr	With heat sink
Agency Certifications					RoHS, CE, UL
Reliability ⁵			100K	hrs	L10 @ 50°C

¹ 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 1cm², to ambient air measured at the inlet to the SynJet.

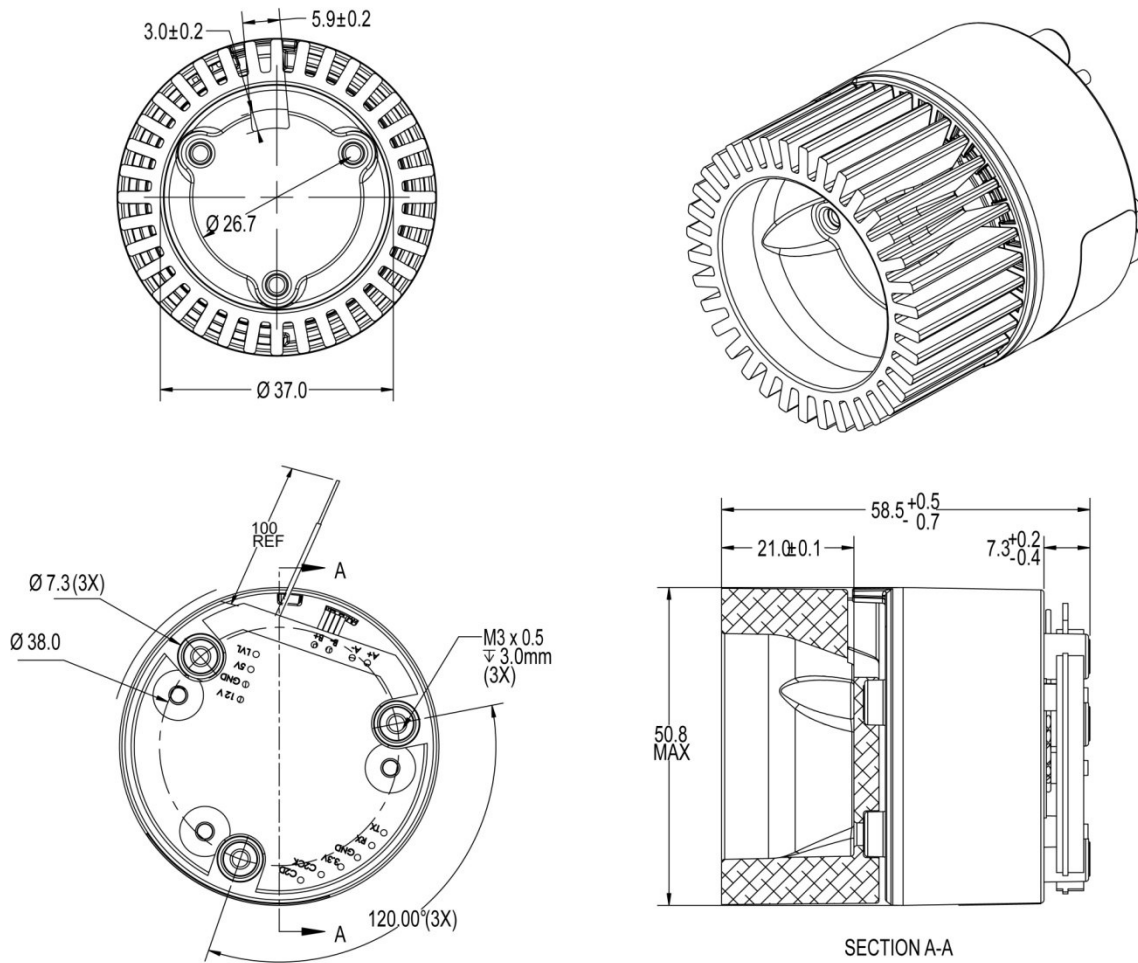
³ SynJet Cooler is suitable for enclosed fixtures but thermal performance will vary depending on the enclosure

⁴ Per ISO 7779

⁵ L10 is the life for which 90% of a group of modules will meet or exceed the specification

PRODUCT

Mechanical drawing



All dimensions in mm.

Part Numbers

MR-16 Cooler	
SM16S-CM005-001	SynJet, MR-16 5v
SM16S-CM005-002	SynJet, MR-16 5v with Heatsink
SM16S-CM012-001	SynJet, MR-16 12v
SM16S-CM012-002	SynJet, MR-16 12v with Heatsink
HM16S-CALBL-001	Heatsink, MR-16

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