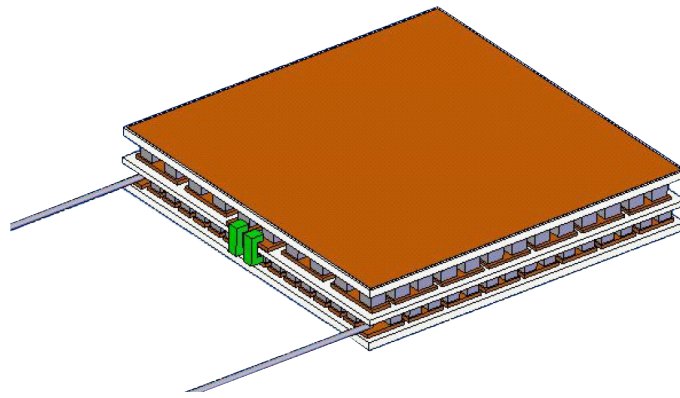


MULTI-STAGE THERMOELECTRIC COOLER NL2076

Multi-Stage Thermoelectric Module



FEATURES

- RoHS EU Compliant
- Rated operating temperature of 85°C
- Maximum processing temperature of 120°C
- Ceramic material: Aluminum Oxide
- Ideal for large temperature differentials (ΔT) and large heat pumping application
- Superior nickel diffusion barriers on elements
- High strength for rugged environment
- Pre-tinned metallized ceramic surfaces(s) with 117°C solder option available
- Burn-in test data option available
- Lapped option available

MULTI-STAGE THERMOELECTRIC COOLER NL2076

Nominal Performance

Nitrogen

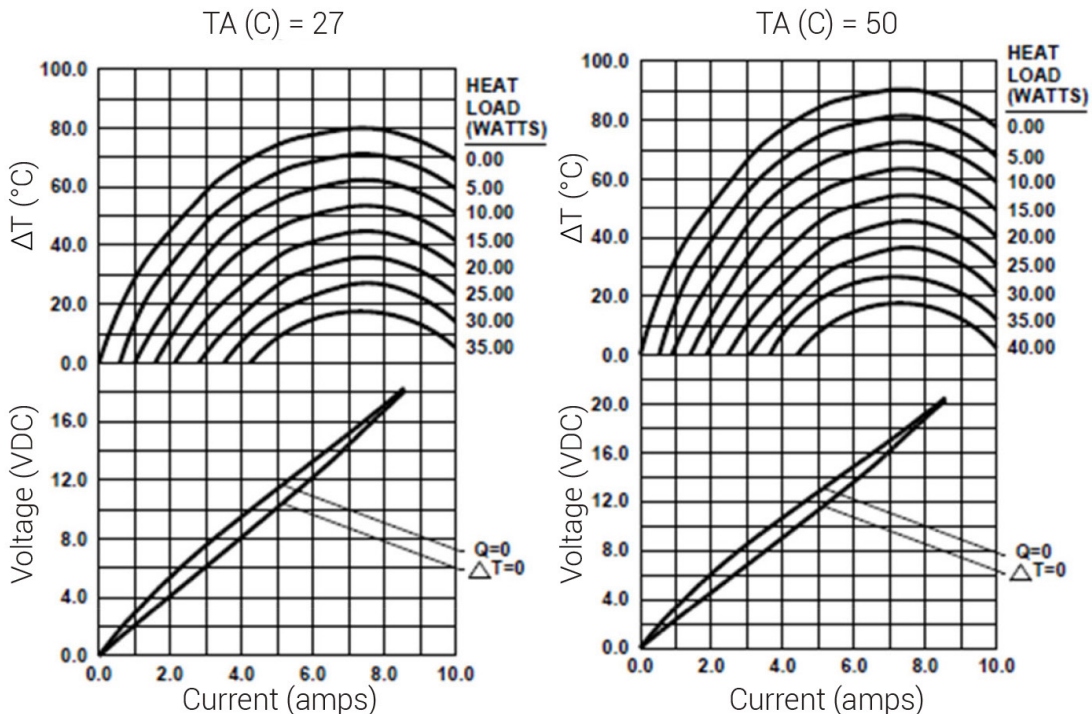
Hot Side Temperature (°C)	27	50
ΔT_{max} (°C)	80	90
Qmax (watts)	44.6	49.3
I _{max} (amps)	7.2	7.1
V _{max} (vdc)	15.5	17.2
AC Resistance (ohms)	1.93	--

Ordering Options

Model Number	Description
NL2076-01AC	TEM, Top and Base Metallized Exterior
NL2076-02AC	TEM, Base Metallized Exterior
NL2076-03AC	TEM, No Metallized Exterior
NL2076-04AC	TEM, Base Pre-tinned w/117°C solder
NL2076-05AC	TEM, Top & Base Metallized Exterior, 203mm Insulated Wires
NL2076-06AC	TEM, No Metallized Exterior, 102mm Au over Ni over Cu Wires, Burn-In Test & Data
NL2076-08AC	TEM, No Metallized Exterior, 203mm Insulated Wires
NL2076-09AC	TEM, No Metallized Exterior, Lapped, 203mm Insulated Wires

Typical Performance Curves

Nitrogen (1 ATM)



Vacuum

Hot Side Temperature (°C)	27	50
ΔT_{max} (°C)	87	99
Qmax (watts)	45.0	49.9
I _{max} (amps)	7.1	7.1
V _{max} (vdc)	15.5	17.2
AC Resistance (ohms)	1.93	--

Operation Cautions

For maximum reliability, storage and operation below 85°C in a non-condensing environment is recommended. To minimize thermal stress, use linear/proportional temperature control or a similar method rather than an ON/OFF method.

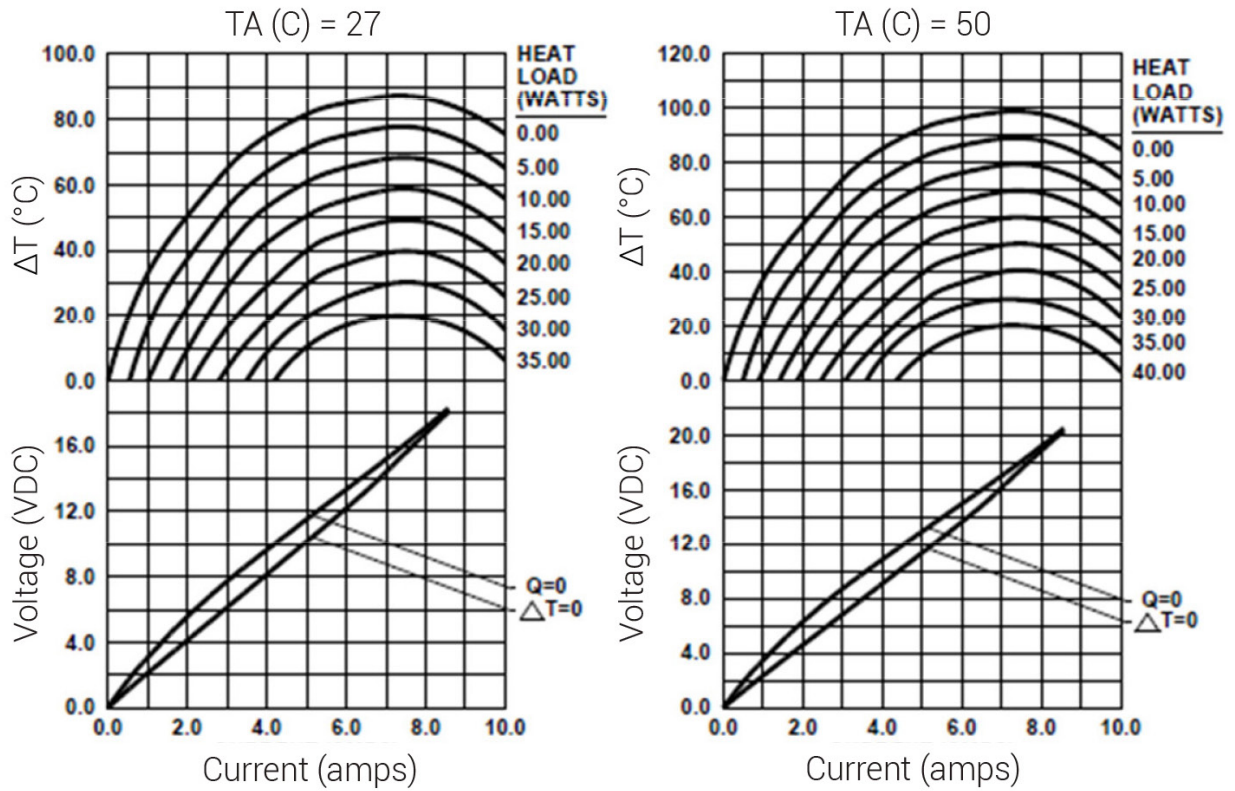
Installation

Recommended mounting methods: Bonding with thermal epoxy or soldering with metallized ceramics. For additional information, please refer to our TEM Installation Guide.

MULTI-STAGE THERMOELECTRIC COOLER NL2076

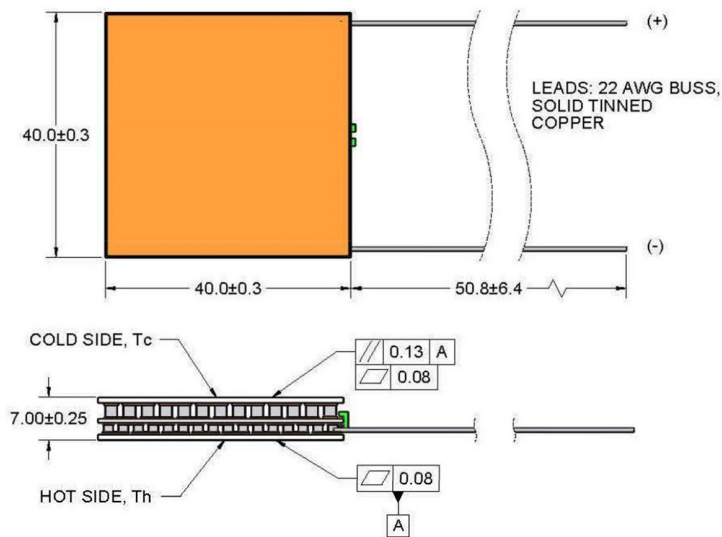
Typical Performance Curves

Vacuum (10^{-5} TORR)



For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, please contact us.

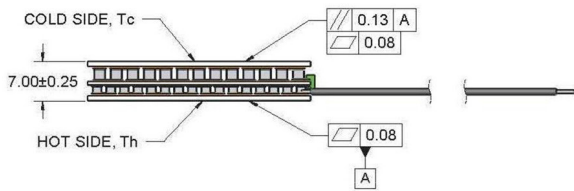
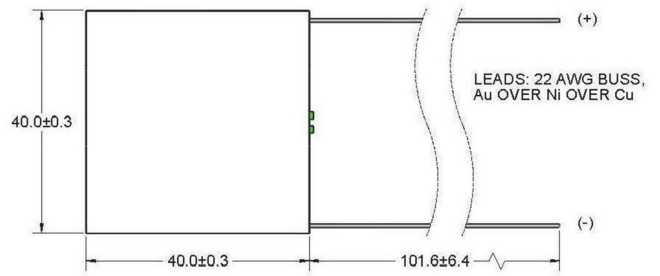
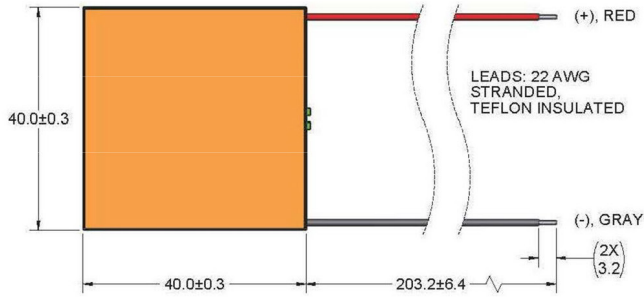
Mechanical Characteristics



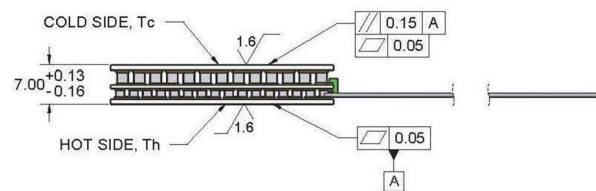
-01AC THRU -04AC

MULTI-STAGE THERMOELECTRIC COOLER NL2076

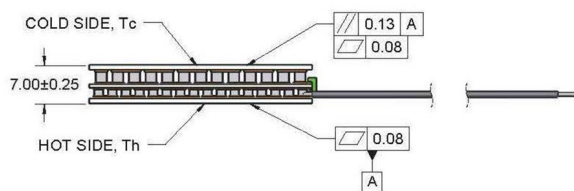
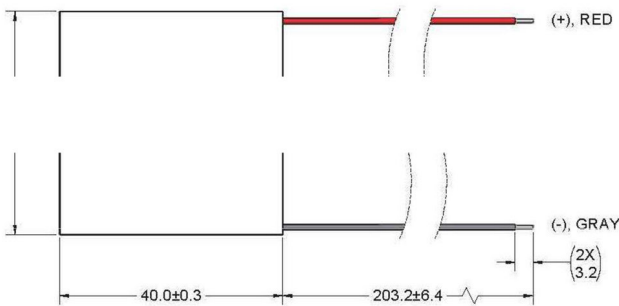
Mechanical Characteristics



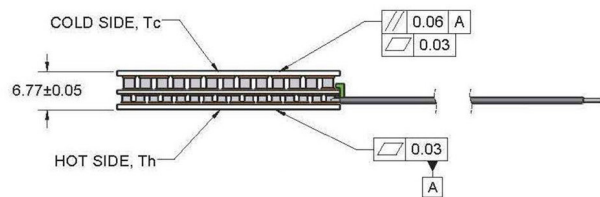
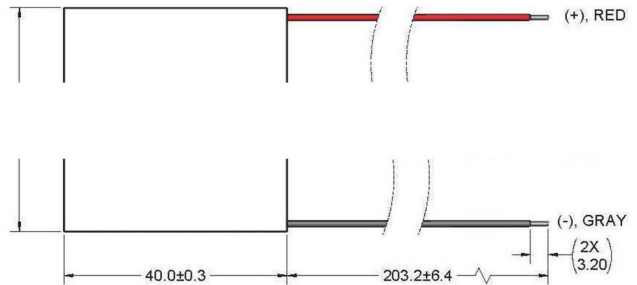
-05AC



-06AC



-08AC



-09AC