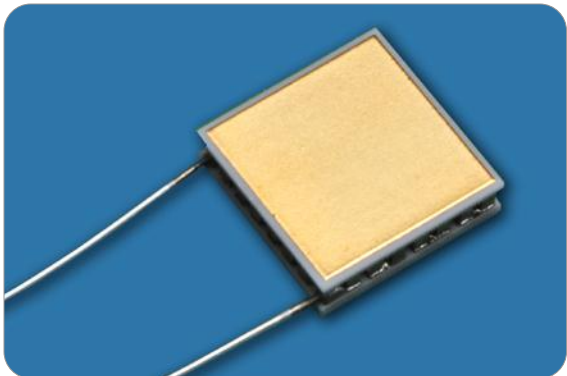




marlow industries, inc.®
Subsidiary of II-VI INCORPORATED

TECHNICAL DATA SHEET



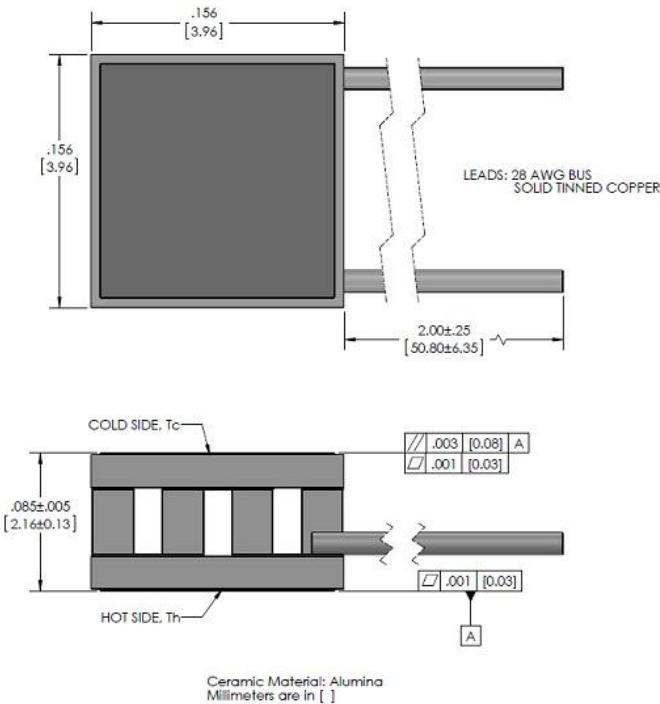
NL1020T

Single-Stage Thermoelectric Cooler
RoHS and REACH EU Compliant

TYPICAL PERFORMANCE VALUES

Hot Side Temperature (°C)	27°C	50°C
ΔT_{max} (°C-dry N ₂):	64	72
Q _{max} (watts):	0.90	1.0
I _{max} (amps):	1.8	1.8
V _{max} (vdc):	0.8	0.9
AC Resistance (ohms):	0.40	--

MECHANICAL CHARACTERISTICS



-01AC, -02AC, -03AC

ORDERING OPTIONS

Model Number	Description
NL1020T-01AC	Both surfaces are metallized
NL1020T-02AC	Hot side exterior is metallized
NL1020T-03AC	No metallization
NL1020T-04AC	No metallization, Insulated Leads, Perimeter Sealed
NL1020T-05AC	No metallization, Insulated Leads

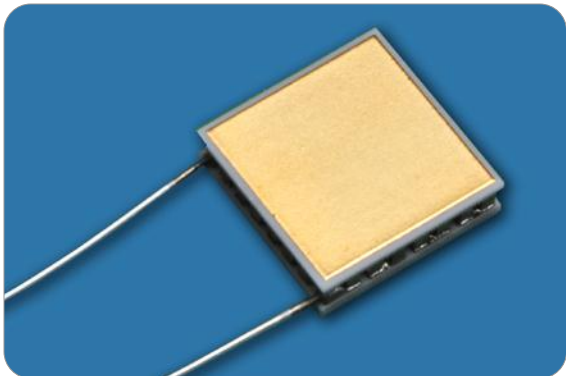
AVAILABLE MODIFICATIONS

Pretinned metallized ceramic surface(s) with 117°C solder.
Thermistor mounted on edge of cold side ceramic. (Calibration available.)
Elevated temperature burn-in with test data provided.



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TECHNICAL DATA SHEET



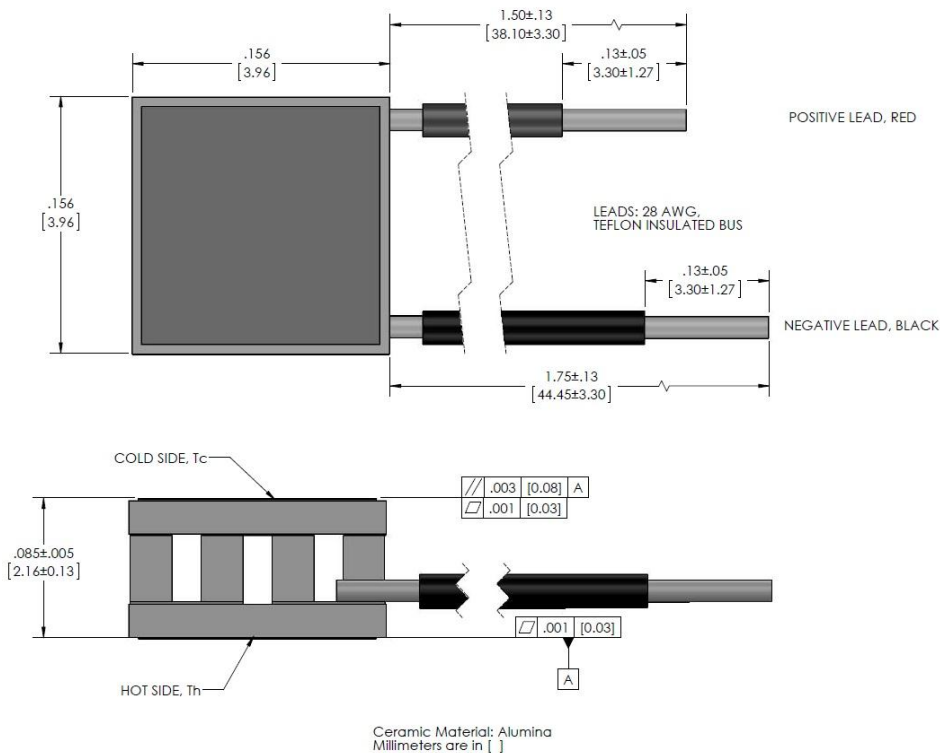
NL1020T

Single-Stage Thermoelectric Cooler
RoHS and REACH EU Compliant

TYPICAL PERFORMANCE VALUES

Hot Side Temperature (°C)	27°C	50°C
ΔT_{max} (°C-dry N ₂):	64	72
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I _{max} (amps):	1.8	1.8
V _{max} (vdc):	0.8	0.9
AC Resistance (ohms):	0.40	--

MECHANICAL CHARACTERISTICS



-04AC, -05AC

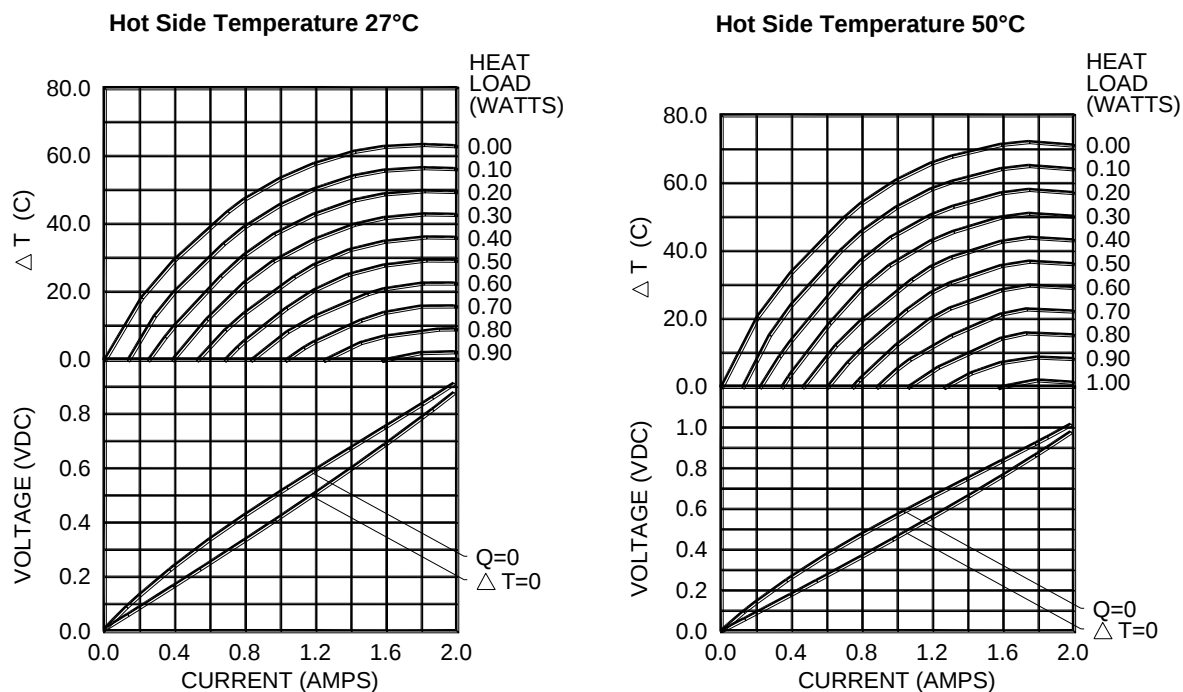
ORDERING OPTIONS

Model Number	Description
NL1020T-01AC	Both surfaces are metallized
NL1020T-02AC	Hot side exterior is metallized
NL1020T-03AC	No metallization
NL1020T-04AC	No metallization, Insulated Leads, Perimeter Sealed
NL1020T-05AC	No metallization, Insulated Leads

AVAILABLE MODIFICATIONS

Pretinned metallized ceramic surface(s) with 117°C solder.
Thermistor mounted on edge of cold side ceramic. (Calibration available.)
Elevated temperature burn-in with test data provided.

ENVIRONMENT: ONE ATMOSPHERE DRY NITROGEN



For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, consult one of our Applications Engineers.

Installation

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

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.

CONTACT US:

For customer support or general questions please contact a local office below or consult our website for distributor information.

Marlow Industries, Inc.
10451 Vista Park Road
Dallas Texas 75238-1645
214-340-4900 (tel)
214-341-5212 (fax)
www.marlow.com

Marlow Industries Europe GmbH
Brunnenweg 19-21
64331 Weiterstadt
Germany
Tel.: +49 (0) 6150 5439 - 403
Fax: +49 (0) 6150 5439 - 400
info@marlow-europe.eu

II-VI Japan Inc.
WBG Marive East 17F
2-6 Nakase, Mihama-ku
Chiba-Shi, Chiba 261-7117
Japan
81 43 297 2693 (tel)
81 43 297 3003 (fax)
center@ii-vi.co.jp
www.ii-vi.co.jp

II-VI Singapore Pte., Ltd.
Blk. 5012, Techplace II
#04-07 & 05-07/12, Ang Mo Kio Ave. 5
Singapore 569876
(65) 6481 8215 (tel)
(65) 6481 8702 (fax)
info@ii-vi.com.sg
www.ii-vi.com.sg

Marlow Industries China, II-VI
Technologies Beijing
A subsidiary of II-VI Incorporated
Rm 202, 1# Lize 2nd Middle Road
Wangjing, Chaoyang District
Beijing 100102 China
010-64398226 ext 105 (tel)
010-64399315 (fax)
info@iivibj.com