

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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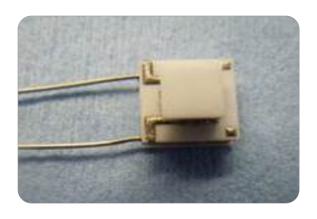






Marlow Industries, Inc. 10451 Vista Park Road Dallas Texas 75238-1645 214-340-4900 www.marlow.com

TECHNICAL DATA SHEET



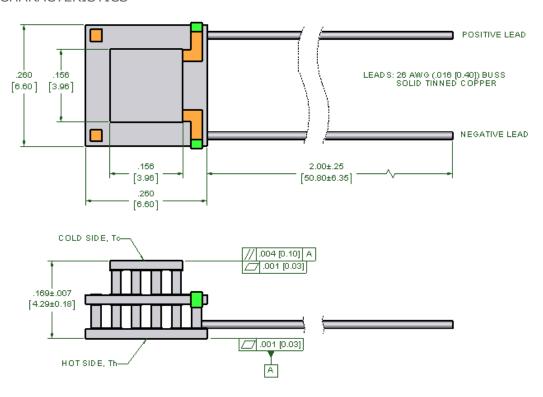
NL2011T

Thermoelectric Cooler RoHS EU Compliant

TYPICAL PERFORMANCE VALUES

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N ₂):	76	87
Qmax (watts):	0.47	0.53
Imax (amps):	0.7	0.7
Vmax (vdc):	1.9	2.2
AC Resistance (ohms):	2.52	

MECHANICAL CHARACTERISTICS



CERAMIC MATERIAL: ALUMINA (AC) MILLIMETERS ARE IN []

ORDERING OPTIONS

Model Number	Description
NL2011T-01 NL2011T-02	both surfaces are metallized hot side exterior is metallized
NL2011T-03	no metallization

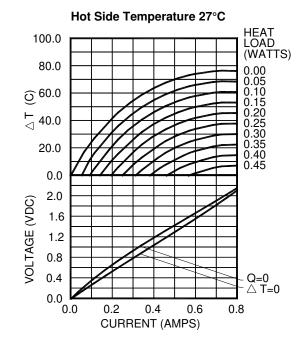
AVAILABLE MODIFICATIONS

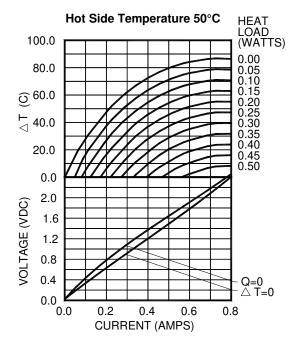
Pretinned metallized ceramic surface(s) with 117°C solder. Thermistor mounted on edge of cold side ceramic. (Calibration available.)

Elevated temperature burn-in with test data provided.

TYPICAL PERFORMANCE CURVES

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.

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