



# Technical Data Sheet for LCC12-8

## Single-Stage Thermoelectric Module



### NOMINAL PERFORMANCE IN NITROGEN

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	66	74
Q <sub>max</sub> (watts):	71	78
I <sub>max</sub> (amps):	7.4	7.4
V <sub>max</sub> (vdc):	14.7	16.4
AC Resistance (ohms):	1.6	---

### PRODUCT FEATURES

- RoHS EU Compliant
- Rated operating temperature of 130°C.
- Ceramic Material: Aluminum Oxide
- Designed for temperature cycling applications.
- Porchless configuration for reduced footprint.
- Superior nickel diffusion barriers on elements.
- High strength for rugged environment.
- RTV sealing option available.
- Lapped option available for multiple module applications.
- ACR Matched Set using Alphanumeric code available (see page 3).

### ORDERING OPTIONS

Model Number	Description
LCC12-8-01	Leadwires
LCC12-8-01L	Leadwires, Lapped
LCC12-8-01S	Leadwires, Sealed
LCC12-8-01LS	Leadwires, Lapped, Sealed
LCC12-8-16LS	Leadwires, Lapped, Sealed, ACR Matched set of 6

### OPERATION CAUTIONS

For maximum reliability, storage and operation below 130°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: Clamp with uniform pressure to a flat surface with thermal interface material. For additional information, please refer to our TEC Installation Guide.

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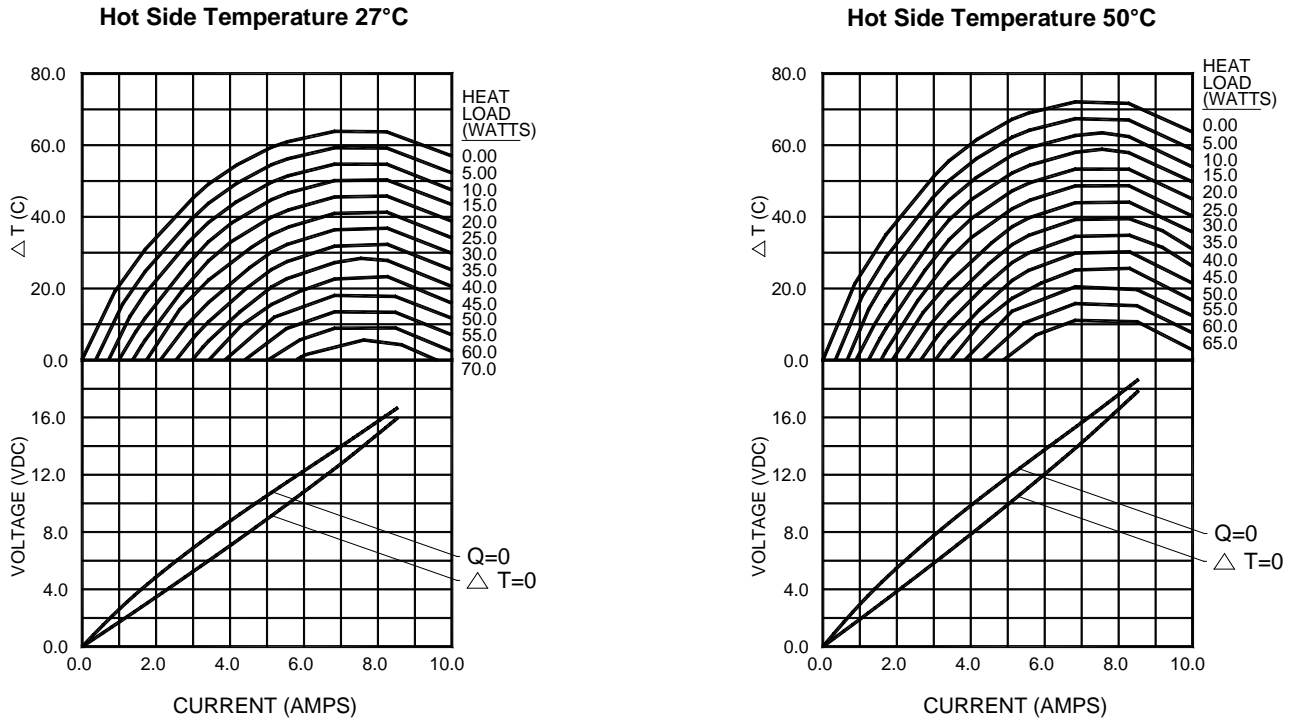
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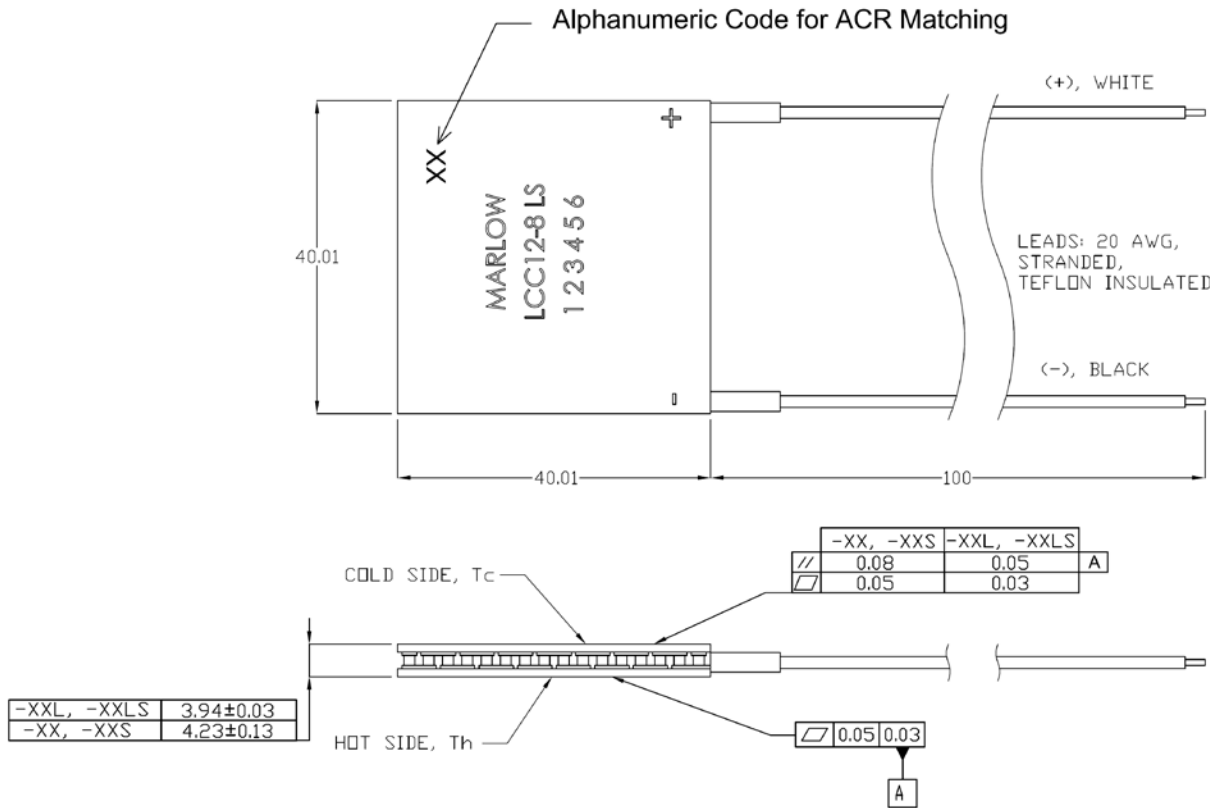
TYPICAL PERFORMANCE CURVES

ENVIRONMENT: ONE ATMOSPHERE DRY NITROGEN



For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, contact one of our Applications Engineers at 877-627-5691.

MECHANICAL CHARACTERISTICS



All dimensions are in millimeters unless otherwise stated.

For customer support or general questions please contact a local office or visit our website at [www.marlow.com](http://www.marlow.com).



ACR Specification @ 23°C			
	Min (ohms)	Max (ohms)	Matching Range (max - min)
	1.450	1.780	0.010
LCC12-8 ACR Matching Table			
Alphanumeric Code	ACR (ohms)		Matching Range (max - min)
	Greater than	Less than or equal to	
A0	1.450	1.460	0.010
A1	1.460	1.470	0.010
A2	1.470	1.480	0.010
A3	1.480	1.490	0.010
A4	1.490	1.500	0.010
A5	1.500	1.510	0.010
A6	1.510	1.520	0.010
A7	1.520	1.530	0.010
A8	1.530	1.540	0.010
A9	1.540	1.550	0.010
B0	1.550	1.560	0.010
B1	1.560	1.570	0.010
B2	1.570	1.580	0.010
B3	1.580	1.590	0.010
B4	1.590	1.600	0.010
B5	1.600	1.610	0.010
B6	1.610	1.620	0.010
B7	1.620	1.630	0.010
B8	1.630	1.640	0.010
B9	1.640	1.650	0.010
C0	1.650	1.660	0.010
C1	1.660	1.670	0.010
C2	1.670	1.680	0.010
C3	1.680	1.690	0.010
C4	1.690	1.700	0.010
C5	1.700	1.710	0.010
C6	1.710	1.720	0.010
C7	1.720	1.730	0.010
C8	1.730	1.740	0.010
C9	1.740	1.750	0.010
D1	1.750	1.760	0.010
D2	1.760	1.770	0.010
D3	1.770	1.780	0.010