



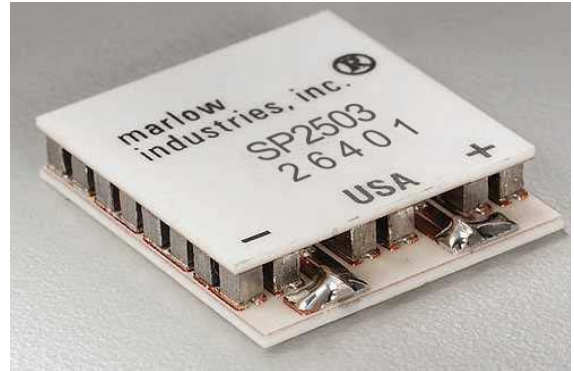
**RoHS 2002/95/EC Compliant**

TECHNICAL DATA SHEET

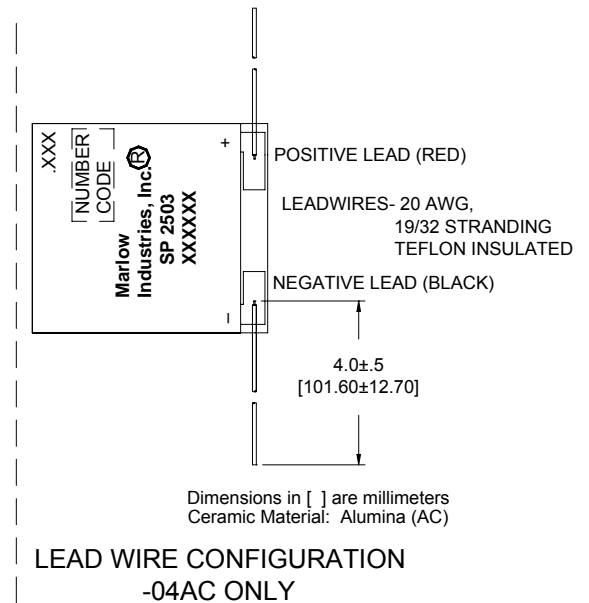
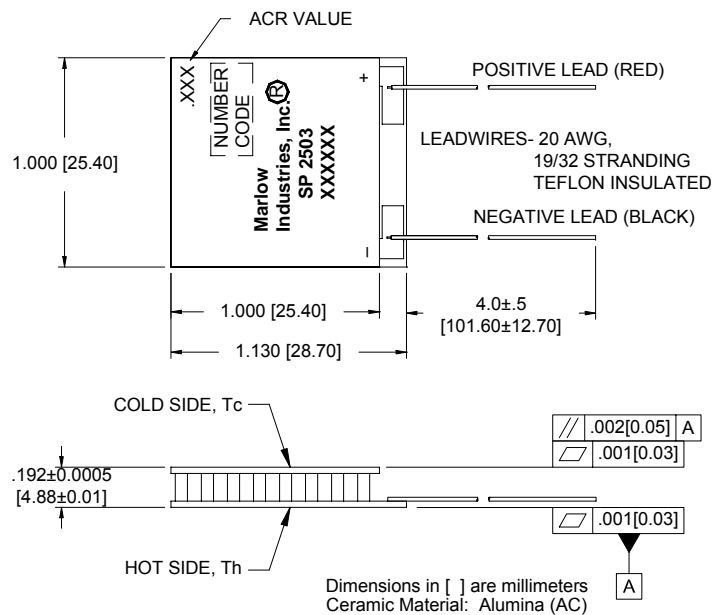
## Thermoelectric Cooler SP2503

### Performance Values

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N <sub>2</sub> ):	62.0	70.6
Qmax (watts):	21.3	23.6
I <sub>max</sub> (amps):	9.36	9.24
V <sub>max</sub> (vdc):	3.48	3.88
AC Resistance (ohms):	0.323	---



### Mechanical Characteristics



### Ordering Options

Model Number	Description
SP2503-03AC	With 4" Leadwire, ACR Marked and Number Coded
SP2503-04AC	With 4" Leadwire, Special Orientation
SP2503-06AC	No Leadwires
SP2503-08AC	No Leadwires, ACR Marked and Number Coded

BINNING CHART	
Zone	ACR @ 23°C
1	.280 - .282
2	.282 - .286
3	.286 - .290
4	.290 - .294
5	.294 - .298
6	.298 - .302
7	.302 - .306
8	.306 - .310
9	.310 - .314
10	.314 - .318
11	.318 - .322
12	.322 - .326
13	.326 - .330
14	.330 - .334
15	.334 - .338
16	.338 - .342
17	.342 - .346
18	.346 - .350
19	.350 - .354
20	.354 - .357

### Features

- **RoHS 2002/95/EC compliant**
- Designed for thermal cycling applications
- Rugged construction
- Porched configuration for enhanced leadwire strength Leadwires attached with 218°C solder
- Rated operating temperature of 130°C
- Height tolerance of ± 0.0005 in. (± 0.01 mm) allows for multiple module applications
- Modules with number coded ACR bin ranges available. See binning chart..

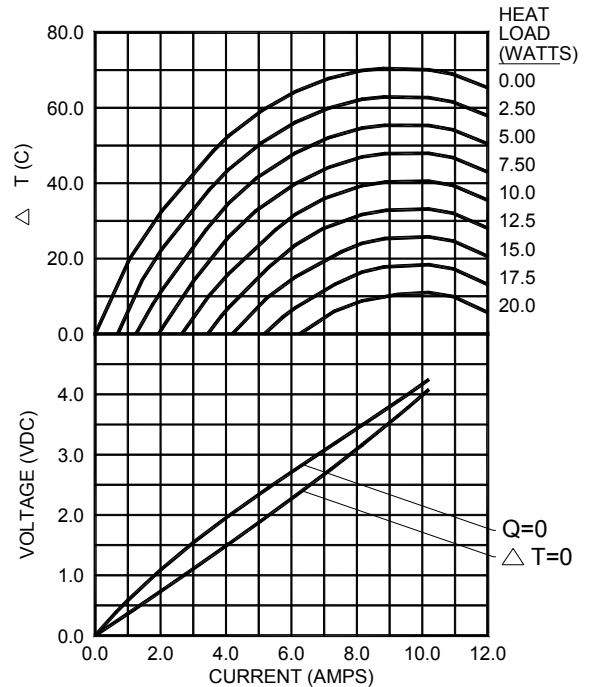
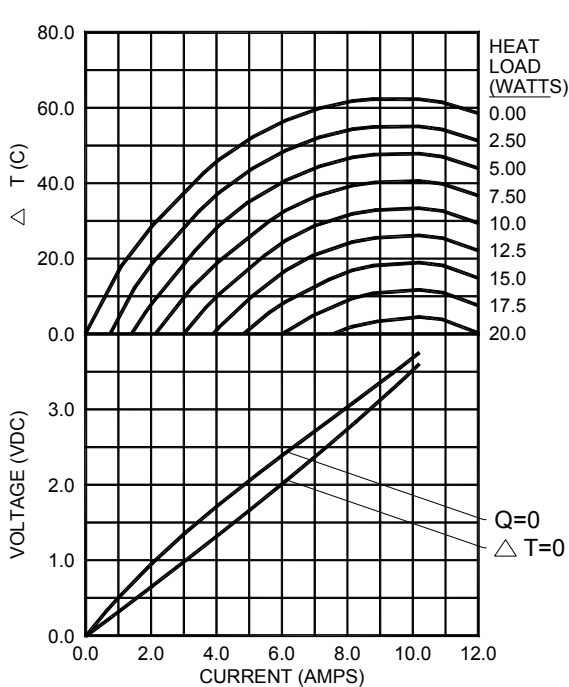


**Performance Curves**

Environment: One atmosphere dry nitrogen

Hot Side Temperature: 27°C

Hot Side Temperature: 50°C



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, mounting in compression with either thermal grease or flexible graphite products. 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.

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