

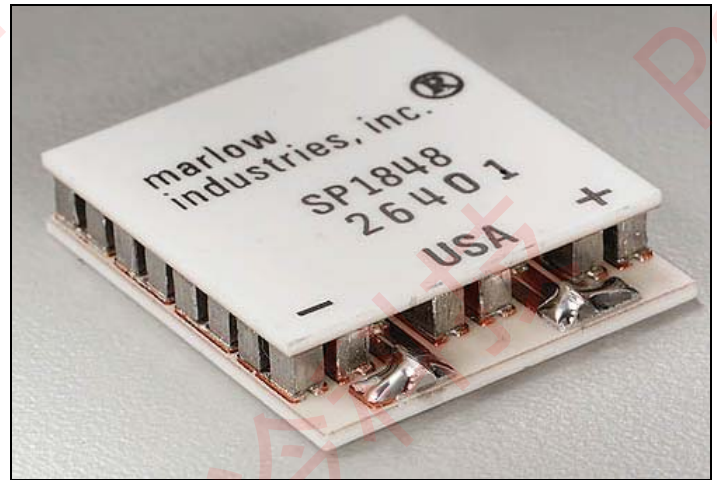


Thermoelectric Cooler

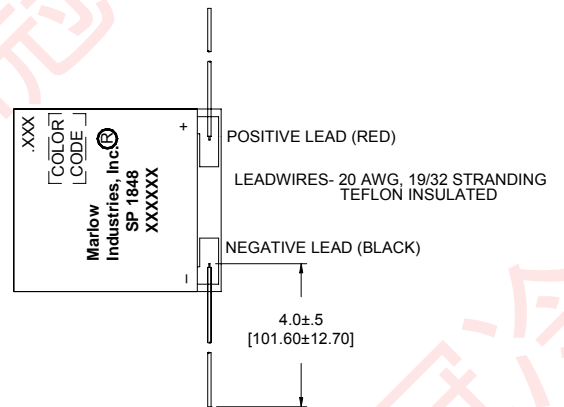
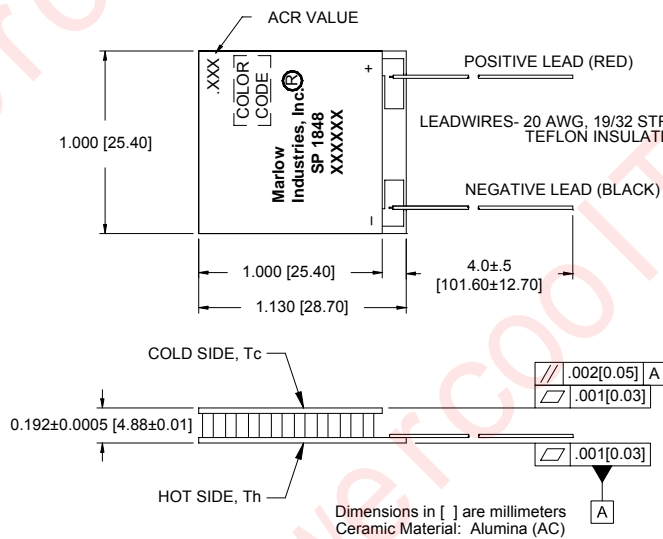
SP1848

Performance Values

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



Mechanical Characteristics



Dimensions in [] are millimeters
Ceramic Material: Alumina (AC)

**LEAD WIRE CONFIGURATION
-04AC ONLY**

Ordering Options

SP1848-03AC	With 4" Leadwire, ACR Marked and Color Coded
SP1848-04AC	With 4" Leadwire, Special Orientation
SP1848-06AC	No Leadwires
SP1848-08AC	No Leadwires, ACR Marked and Color Coded

ZONE	COLOR	ACR @ 23°C
A	BLUE	.318 - .322
B	GREEN	.322 - .326
C	PURPLE	.326 - .330
D	BROWN	.330 - .334
E	BLACK	.334 - .338
F	ORANGE	.338 - .342

Features

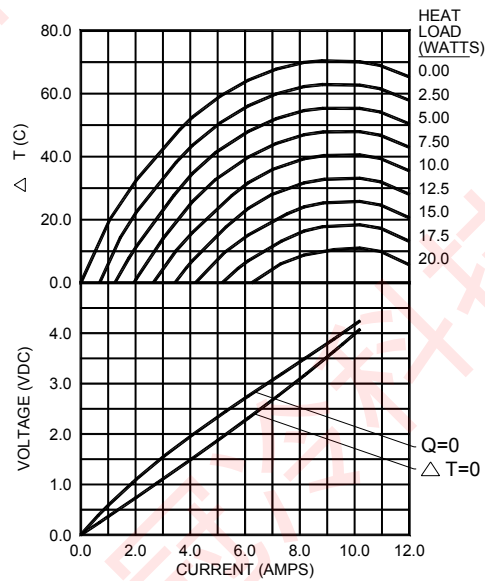
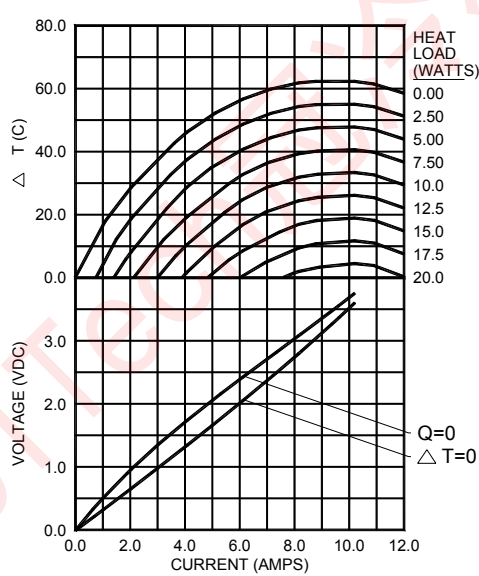
- Designed for thermal cycling applications
- Rugged construction
- Porched configuration for enhanced leadwire strength
Leadwires attached with 183°C solder
- Rated operating temperature of 130°C
- Height tolerance of ± 0.0005 in. (± 0.01 mm) allows for multiple module applications
- Modules with color 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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