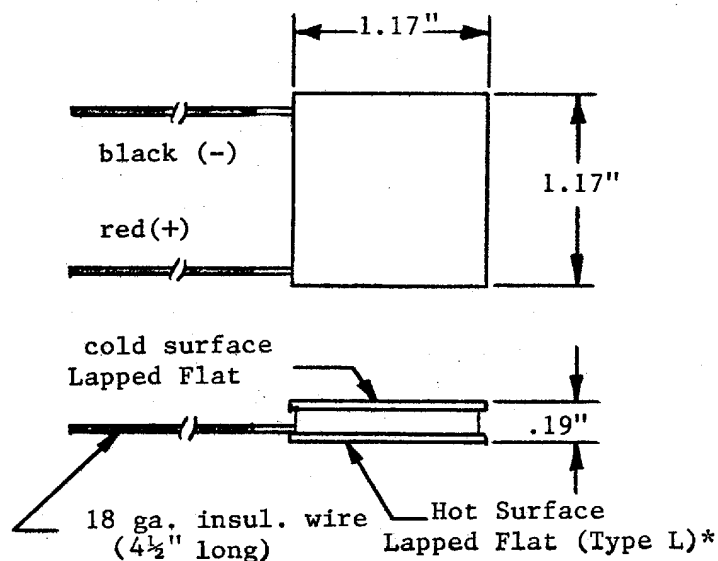
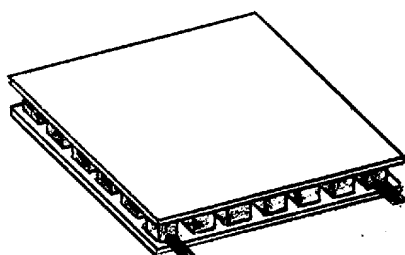




CPI. 4-71-10L

TECHNICAL DATA

Available in 3, 7, 11, 17, and 35 thermocouple sizes in addition to full 71 couple size. Refer to Module Specification Tables for performance and dimensional data.

* Hot surface also available Metallized & tinned (Type TL)

APPLICATION:

A low current, low capacity module, especially suited for direct D. C. battery operation.

DESCRIPTION:

A low current, solderable, ceramic insulated thermoelectric module. Each module contains 71 thermocouples, each element .10" in length and 1.4 mm square in cross section. Thermoelectric material is a quaternary alloy of bismuth, tellurium, selenium, and antimony with small amounts of suitable dopants, carefully processed to produce an oriented polycrystalline ingot with superior anisotropic thermoelectric properties. Metallized ceramic plates afford maximum electrical insulation and thermal conduction.

PERFORMANCE AND ELECTRICAL CHARACTERISTICS:

See graphs on reverse side.

OPERATING TEMPERATURE RANGE:

-150°C to + 80°C

MECHANICAL CHARACTERISTICS:

Design stresses: 400 lbs tensile, 500 lbs compression, 250 lbs shear. Properly mounted, will normally meet rigid shock and vibration requirements.

VOLTS INPUT

WATTS HEAT PUMPED -

DELTA T, °C.

HEAT SINK
TEMP.

$T_h = 122^\circ\text{F.}$
(50°C.)

$T_h = 95^\circ\text{F.}$
(35°C.)

$T_h = 80.6^\circ\text{F.}$
(27.0°C.)

T_c - MODULE COLD SURFACE TEMPERATURE, °F.

