TEC Specification Sheet

CUSTOM THERMOELECTRIC
Your Thermoelectric Partner

Part #	I_{max} (Amps)	Q_{max} (Watts)	V_{max} (Volts)	DT_{max} (°C)	T_{max} (°C)
12711-5P31-30CZ	30.0	270	15.2	62°C	125°C
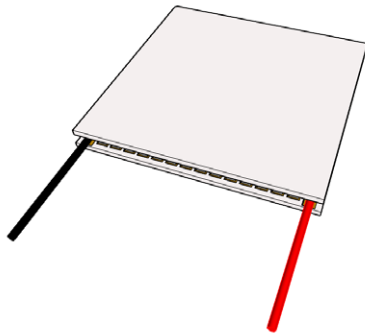
Lapped

Custom Options:

Call for custom wire types and other custom options.
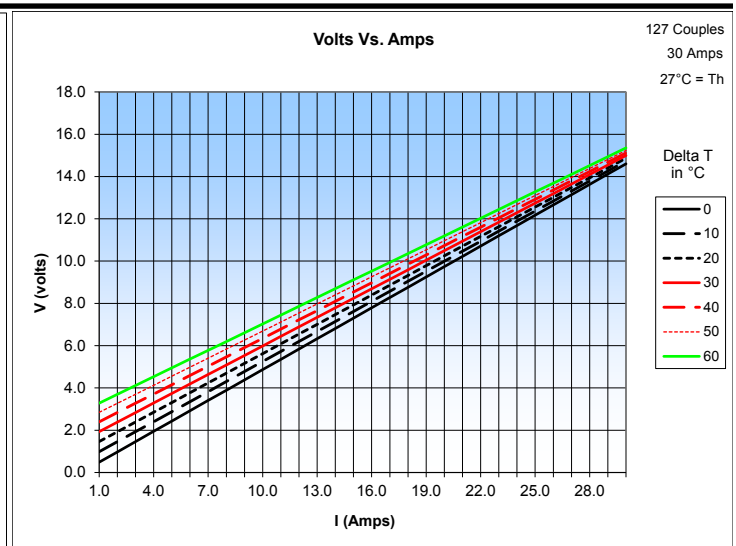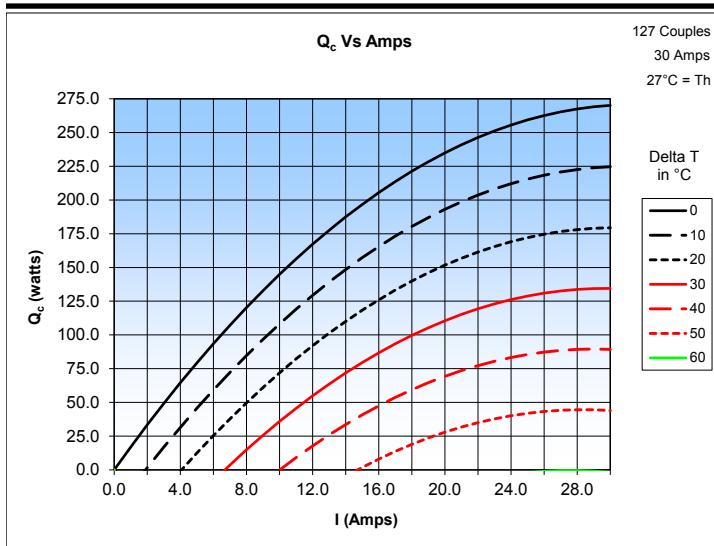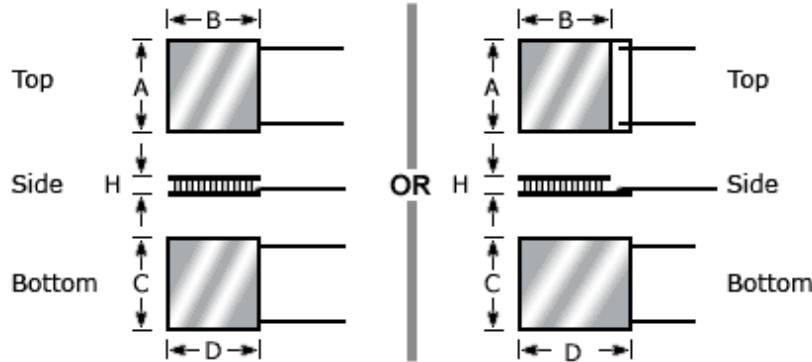
Notes:

Typical power input is 40% to 80% of I_{max}

Maximum Waste Heat (exiting the hot side) at 100% input power, $I=I_{max}$, $V=V_{max}$ is;

$(I_{max} * V_{max}) + Q_{max}$ = **726.0 watts**

Use of a properly sized heat sink or water block is required to remove waste heat.

Bottom Plate				Top Plate				Metallized Height		Lapped Height	
A		B		C		D		H		H	
mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
62.0	2.44	62.0	2.44	62.0	2.44	62.0	2.44	NA	NA	3.8	.150

Tolerances (typical) A, B, C, D = +/-0.25mm (+/-0.01”) H = +/-0.15mm (+/-0.006”)

Weight (w/o leads)
68 grams

Q_c Vs Amps

127 Couples
30 Amps
27°C = Th

Delta T in °C
— 0
– – 10
····· 20
— 30 (red)
– – 40 (red)
····· 50 (red)
— 60 (green)

Q_c (watts) vs I (Amps)

Volts Vs. Amps

127 Couples
30 Amps
27°C = Th

Delta T in °C
— 0
– – 10
····· 20
— 30 (red)
– – 40 (red)
····· 50 (red)
— 60 (green)

V (volts) vs I (Amps)

Charts above are tested at a T_H=27°C. At higher T_H temperatures, TEC resistance increases. Since V=I*R, expect amperage to decrease for a given fixed voltage.