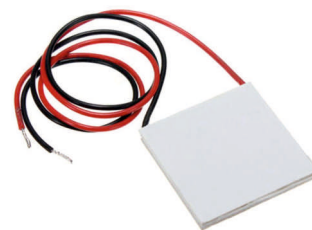


Thermoelectric modules

Part Number	Data obtained at hot plate temperature Th=27°C				Dimension WxLxHmm
	I _{max} (amps)	DT _{max} (°C)	U _{max} (volts)	Q _{max} (watts)	
SM TH C1-01108	8.9	70	1.4	7.7	9.5x14.2x3.35
SM TH C1-01703	4.7	70	2.16	5.45	15x15x4.2
SM TH C1-01704	5.2	70	2.16	6.9	15x15x4.0
SM TH C1-01706	6.2	70	2.16	8.27	15x15x3.8
SM TH C1-01708	8.4	70	2.2	11.5	15x15x3.5
SM TH C1-02405P	6.6	70	3.1	12.8	29.7/32.2x10x4.6
SM TH C1-03103	3.8	70	4.0	9.3	20x20x4.2
SM TH C1-03104	4.7	70	4.0	11.81	20x20x4.05
SM TH C1-03106	5.5	70	4.0	13.7	20x20x3.8
SM TH C1-03108	8.3	70	4.0	20.7	20x20x3.5
SM TH C1-03114	14	70	3.9	34.2	30x30x4.4
SM TH C1-03504	4.0	70	4.5	11.2	30x15x4.0
SM TH C1-03505	5.3	70	4.5	14.9	30x15x4.0
SM TH C1-04904	3.9	70	6.3	15.4	25x25x4.05
SM TH C1-04905	5.3	70	6.3	20.9	25x25x3.9
SM TH C1-06304	4.0	70	8.7	21.0	20x40x4.45
SM TH C1-06304L1	4.0	70	8.7	21.0	20x40x4.15
SM TH C1-06310	10.0	70	8.7	54.9	20x40x3.64
SM TH C1-07103	3.8	70	8.9	21.3	30x30x4.2
SM TH C1-07104	4.7	70	8.9	26.3	30x30x4.05
SM TH C1-07105	5.0	70	8.9	28.0	30x30x3.9
SM TH C1-07106	6.2	70	8.9	34.7	30x30x3.8
SM TH C1-07108	8.0	70	8.9	46.6	30x30x3.5
SM TH C1-07115	14.9	70	8.9	83.4	40x40x3.55
SM TH C1-07125	24.5	70	8.9	137.2	40x40x3.4
SM TH C1-08320	19.0	70	10.5	124.7	44x38/42x3.7
SM TH C1-124038CH4.7	3.8	70	15.7	36.9	40x40x4.2
SM TH C1-12405CH4.7	5.0	70	15.6	48.9	40x40x3.7
SM TH C1-12408CH4.7	8.0	70	15.6	78.3	40x40x3.3
SM TH C1-12702	3.1	70	16	32.3	40x40x5.3
SM TH C1-12703	4.0	70	15.8	39.8	40x40x4.2
SM TH C1-12703S	3.66	70	16	36.7	40x40x4.65
SM TH C1-12704	4.9	70	16	49.2	40x40x4.1
SM TH C1-12705	5.4	70	16	54.1	40x40x4.0
SM TH C1-12706	6.1	70	16	61.4	40x40x3.8
SM TH C1-12707	7.0	70	16	70.1	40x40x3.7
SM TH C1-12707S	6.6	70	16	66.2	62x62x6.15
SM TH C1-12708L1	8.2	70	16.2	81.7	40x40x3.2
SM TH C1-12708P	8.2	70	16.2	81.7	40x44x3.3
SM TH C1-12710	10.1	70	16	101.1	40x40x3.2
SM TH C1-12712S	11.5	70	16	115.2	40x40x3.2
SM TH C1-12714	14.0	70	16	140.2	50x50x4.3
SM TH C1-12714S	14.0	70	16	140.2	62x62x4.9
SM TH C1-12715	15.0	70	16	150.2	50x50x4.0
SM TH C1-12718	16.0	70	16.2	159.4	50x50x3.95
SM TH C1-12718N	17.0	70	15.8	165.3	50x50x3.9
SM TH C1-12722	18.5	70	16	185.3	40x40x3.0
SM TH C1-12722S	18.5	70	16	185.3	55x55x3.3
SM TH C1-12724	21.0	70	16	210.4	55x55x4.05
SM TH C1-12725	22.0	70	16	220.4	62x62x4.25
SM TH C1-12730	26.0	70	16	260.4	55x55x4.1
SM TH C1-12735S	30.0	70	16	300.5	55x55x4.0
SM TH C1-16104	4.8	70	20.2	60.9	40x40x3.9
SM TH C1-16106	6.3	70	20.4	79.6	40x40x3.7
SM TH C1-19906	6.1	70	24.74	94.9	40x40x3.8
SM TH C1-19908	8.5	70	25	133.4	40x40x3.6
SM TH C1-19908S	8.5	70	25	133.4	50x55x3.8
SM TH C1-19911	11.0	70	25	172.6	40x40x3.45



SM TH C1 Series:

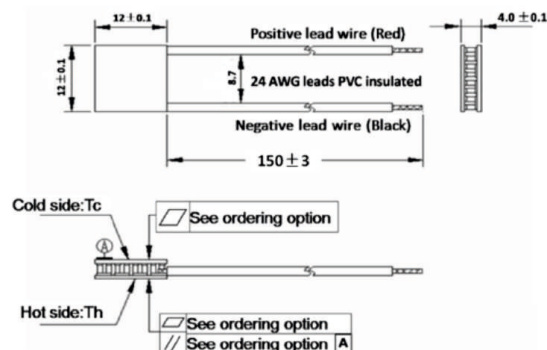
- * thermoelectric modules for larger current and heat pumping applications

Typical applications:

- * food service refrigerator
- * portable cooler box for cars
- * liquid cooling
- * temperature stabilizer

Manufacturing Options:

- * Solder (e.g. T200: CuSn)
- * Sealant (e.g. Epoxy, Silicone)
- * Ceramics (e.g. Alumina)
- * Ceramics Surface Options (e.g. Metallized)



Thermoelectric modules

Part Number	Data obtained at hot plate temperature Th=27°C				Dimension WxLxHmm
	I _{max} (amps)	DT _{max} (°C)	U _{max} (volts)	Q _{max} (watts)	
SMTH H1-01703	4.3	70	2.2	6.4	15x15x4.2
SMTH H1-01704	4.9	70	2.2	6.8	15x15x4.0
SMTH H1-01706	5.7	70	2.2	8.0	15x15x3.8
SMTH H1-01708	8.5	74	2.2	12.0	15x15x3.5
SMTH H1-02405	6.8	74	3.2	13.4	29.7x10x4.6
SMTH H1-03103	4.3	74	4.1	10.7	20x20x4.2
SMTH H1-03104	5.1	74	4.1	13.0	20x20x4.05
SMTH H1-03106	6.0	74	4.1	15.3	20x20x3.8
SMTH H1-03108	8.5	74	4.1	21.7	20x20x3.5
SMTH H1-03114	14	74	4.9	35.8	30x30x4.4
SMTH H1-03505	5.4	74	4.6	15.5	15x30x4.0
SMTH H1-04904	4.6	72	6.4	18.7	25x25x4.05
SMTH H1-04904S	4.6	74	6.5	18.5	45x15x5.0
SMTH H1-04905	5.8	74	6.5	23.4	25x25x3.9
SMTH H1-07103	4	74	9.4	23.4	30x30x4.2
SMTH H1-07104	4.9	74	9.3	28.6	30x30x4.05
SMTH H1-07106	6.3	74	9.3	39.2	30x30x3.8
SMTH H1-07108	8.3	74	9.3	51.6	30x30x3.5
SMTH H1-07115	15.3	74	9.3	95.1	40x40x3.55
SMTH H1-07125	25.2	74	9.4	156.8	40x40x3.4
SMTH H1-08320	19.6	74	10.9	136.8	40x38/42 x 3.7
SMTH H1-127010	1.6	74	16.8	16.7	40x40x7.1
SMTH H1-127012	1.98	74	16.8	20.7	40x40x6.2
SMTH H1-127018	3.3	74	16.8	31.7	40x40x4.8
SMTH H1-12702	3.2	74	16.8	35.6	40x40x5.3
SMTH H1-12703	4.2	74	16.8	44.6	40x40x4.2
SMTH H1-12703S	3.8	74	16.8	39.4	40x40x4.65
SMTH H1-12704	5.5	74	16.8	54.0	40x40x4.05
SMTH H1-12705	5.6	74	16.8	58.6	40x40x3.7
SMTH H1-12706	6.3	74	16.8	66.0	40x40x3.8
SMTH H1-12706P	6.3	74	16.8	66.0	40x44x3.8
SMTH H1-12707S	6.8	74	16.8	72.7	62x62x6.15
SMTH H1-12708	8.4	74	16.8	90.0	40x40x3.5
SMTH H1-12708P	8.4	74	16.8	90.0	40x44x3.3
SMTH H1-12710	10.1	74	16.8	108.0	40x40x3.6
SMTH H1-12712S	11.5	74	16.8	122.6	40x40x3.2
SMTH H1-12714	14	74	16.8	146.0	50x50x4.3
SMTH H1-12714P	14	74	16.8	146.2	50x50/55x4.3
SMTH H1-12714S	14.4	74	16.8	150.5	62x62x4.9
SMTH H1-12718	16.8	74	16.8	176	50x50x3.95
SMTH H1-12722	22	74	16.8	234.9	55x55x3.3
SMTH H1-12725	22.5	74	16.8	240.5	62x62x4.25
SMTH H1-12735S	30.8	74	16.8	329.0	55x55x4.0
SMTH H1-16104	4.8	74	21.2	64.9	40x40x3.9
SMTH H1-16106	6.3	74	21.2	85.3	40x40x3.7
SMTH H1-19906	6.4	74	26.26	107	40x40x3.8
SMTH H1-19908	8.8	74	26.3	147.2	40x40x3.6
SMTH H1-19908S	8.8	74	26.3	147.2	50x55x3.8
SMTH H1-19911	11	74	26.2	184.1	40x40x3.45
SMTH H1-19912	11.6	74	26.3	194.8	40x40x3.2
SMTH H1-19914	14.2	74	26.3	237.6	40x40x3.1
SMTH H1-19914L	14.2	74	26.3	237.6	50x50x3.4
SMTH H1-19916	14.7	74	26.3	240.7	40x40x3.1
SMTH H1-19933	33	74	26.2	552.3	62x62x3.8
SMTH H1-19940	40	74	26.2	669.4	62x62x3.8
SMTH H1-21908	8.4	74	28.9	154.2	55x50x3.85
SMTH H1-24106	6.2	74	31.8	125.6	55x55x3.9
SMTH H1-24111	11	74	31.8	222.9	55x55x3.7



SM TH H1 Series:

* thermoelectric modules is a single stage module made of selected ingots for superior cooling and achieves

Typical applications:

* high effective single thermoelectric stage coolers for industrial cooling



Thermoelectric modules

Part Number	Data obtained at hot plate temperature Th=27°C				Dimension WxLxHmm
	I _{max} (amps)	DT _{max} (°C)	U _{max} (volts)	Q _{max} (watts)	
SM TH F1-00205P	0.5	73	0.24	0.09	1.0x1.6x1.4
SM TH F1-00208P	0.8	72	0.26	0.13	1.0x1.6x1.1
SM TH F1-00211P	1.1	71	0.26	0.17	1.0x1.6x0.9
SM TH F1-00309S	0.9	70	0.38	0.21	1.2x2.6x0.9
SM TH F1-00515	1.5	70	0.6	0.46	1.4x3.2/3.8x1.1
SM TH F1-00524	2.4	70	0.63	0.94	2x5x2
SM TH F1-00524P	2.4	70	0.62	0.93	2x4.45x1.5
SM TH F1-00706	0.6	74	0.92	0.35	2.56x2.56x2.0
SM TH F1-00708	1.3	70	0.89	0.57	4.2x4.2x2.6
SM TH F1-00708S	0.8	74	0.92	0.48	2.56x2.56x1.7
SM TH F1-00709	0.9	74	0.92	0.52	3.2x3.2x1.9
SM TH F1-00712	1.47	70	0.89	0.80	4.2x4.2x2.5
SM TH F1-00720	2.3	70	0.89	1.12	4.2x4.2x2.3
SM TH F1-00807P	0.7	74	1.5	0.48	2.56x2.56x1.1
SM TH F1-00808P	0.8	74	1.5	0.54	2.56x2.56x1.7
SM TH F1-01206P	0.6	74	1.58	0.61	2.56x3.8x2.0
SM TH F1-01207P	0.7	74	1.58	0.71	2.56x3.8x1.8
SM TH F1-01208P	0.8	74	1.58	0.81	2.56x3.8x1.7
SM TH F1-01218P	1.8	74	1.6	1.84	2.56x3.8x1.1
SM TH F1-01706	0.6	74	2.2	0.86	3.8x3.8x2.0
SM TH F1-01707	0.7	74	2.2	1.0	3.8x3.8x1.8
SM TH F1-01708	1.7	70	2.16	1.43	6.2x6.2x2.6
SM TH F1-017083	0.83	70	2.16	1.11	6.2x6.2x2.7
SM TH F1-01712	1.47	70	2.16	1.96	6.2x6.2x2.6
SM TH F1-01715	1.8	70	2.5	2.8	6.0x6.0x2.0
SM TH F1-01720	2.17	70	2.16	2.9	6.2x6.2x2.3
SM TH F1-01806P	0.6	74	2.37	0.91	3.8x3.8x2.0
SM TH F1-01807P	0.7	74	2.37	1.6	3.8x3.8x1.8
SM TH F1-01818P	1.8	74	2.38	2.72	3.8x3.8x1.1
SM TH F1-02306P	0.6	74	3.3	1.16	3.8x5.04x2.0
SM TH F1-02307P	0.7	74	3.3	1.36	3.8x5.04x1.8
SM TH F1-02312	1.2	74	3.3	2.32	6x8x2
SM TH F1-02318P	1.8	74	3.3	3.48	3.8x5.04x1.1
SM TH F1-02319	2.32	70	2.9	4.19	6x8x1.65
SM TH F1-02323P	2.3	74	3.3	4.45	3.8x5.04x0.97
SM TH F1-03106	0.77	70	3.94	1.88	8x8x3.25
SM TH F1-03107	0.7	74	4.0	1.83	5.04x5.04x1.8
SM TH F1-03108	1.7	70	3.94	2.6	8.3x8.3x2.6
SM TH F1-03112	1.47	70	3.78	3.50	8.3x8.3x2.5
SM TH F1-03120	2.37	70	3.94	5.77	8.3x8.3x2.3
SM TH F1-03124	2.7	70	3.94	6.58	8.3x8.3x2.35
SM TH F1-03506	0.6	74	4.6	1.77	3.8x7.52x2.0
SM TH F1-03507	0.7	74	4.6	2.7	3.8x7.52x1.8
SM TH F1-03520	2.16	70	4.46	5.95	6x12x2.3
SM TH F1-03521	2.2	68	4.4	5.8	6x12x2.55
SM TH F1-04906	0.6	74	6.4	2.5	6.28x6.28x2.0
SM TH F1-04907	0.7	74	6.4	2.9	6.28x6.28x1.8
SM TH F1-05110TD1.8	1.0	74	6.4	4.1	10x20x3.8
SM TH F1-06306	0.6	74	8.3	3.2	5x10x2.0
SM TH F1-06307	0.7	74	8.3	3.8	5x10x1.8
SM TH F1-06520	1.62	70	8.27	8.26	12x13x2.75
SM TH F1-06612P	1.5	74	8.7	8.1	13x13x2.7
SM TH F1-07106	0.6	74	9.3	3.6	7.52x7.52x2.0
SM TH F1-07107	0.7	74	9.3	4.18	7.52x7.52x1.8
SM TH F1-07108	1.4	70	8.9	6.3	6x24x2.45
SM TH F1-07112	1.39	68	8.34	7.7	12x12x2.4
SM TH F1-07120	1.75	68	8.66	9.52	6x24x2.3
SM TH F1-07120S	2	70	8.9	11.6	6x24x2.3

SM TH F1 Series:

* thermoelectric modules designed for optoelectronic and telecom applications



Typical applications:

* Photonic instruments
* Medical instruments
* Scientific instruments

Biomass Stove with Power Generator TEG-BS Series:



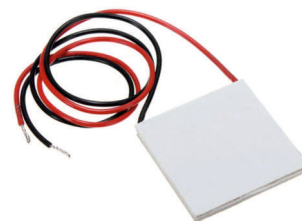
Typical application:

* Charging / Power Supply



Thermoelectric modules

Part Number	Data obtained at hot plate temperature Th=27°C				Dimension WxLxHmm
	I _{max} (amps)	DT _{max} (°C)	U _{max} (volts)	Q _{max} (watts)	
SM TH T1-127010	1.6	74	16.8	16.7	40x40x7.1
SM TH T1-127012	1.98	74	16.8	20.7	40x40x6.2
SM TH T1-127018	3.3	74	16.8	31.7	40x40x4.8
SM TH T1-12703S	3.8	74	16.8	39.4	40x40x4.65
SM TH T1-12704	5.5	74	16.8	54	40x40x4.05
SM TH T1-12705	5.6	74	16.8	58.6	40x40x3.7
SM TH T1-12706	6.3	74	16.8	66	40x40x3.8
SM TH T1-12708	8.4	74	16.8	90	40x44x3.3
					40x40x3.5
SM TH T1-12714	14	74	16.8	146	50x50x4.3
SM TH T1-12714S	14.4	74	16.8	150.5	62x62x4.9
SM TH T1-12718	16.8	74	16.8	176.0	50x50x3.95
SM TH T1-12722	22	74	16.8	234.9	55x55x3.3
SM TH T1-16104T100S1	4.5	70	20.4	56.8	40x40x3.7
SM TH T1-19908	8.8	74	26.3	147.2	40x40x3.6
SM TH T1-19912	11.6	74	26.3	194.8	40x40x3.2
SM TH T1-19914	13	74	26.3	217.2	40x40x3.1
SM TH T1-21908	8.4	74	28.9	154.2	55x50x3.85
SM TH T1-24105	5.8	74	31.8	117.5	55x55x4.2
SM TH T1-24106	6.2	74	31.8	125.6	55x55x3.9
SM TH T1-24111	11	74	31.8	222.9	55x55x3.7
SM TH T1-24116	11.4	74	31.8	231.3	55x55x3.75
SM TH T1-24127	25.2	74	31.8	511.3	62x62x3.9
SM TH T1-26315	15	74	34.6	331.4	50x50x4.15
SM TH T1-26318	19.4	74	34.7	428.5	50x50x4.0



SM TH T1 Series:

* thermoelectric modules is good for the need of frequently cooling down and heating up to 100°C application.

Typical applications:

T1 Series is a single stage module made of selected ingots and fabricated by our unique „soft“ processes to achieve superior cooling/heating thermal cycling performance. It can run up to million cycles with less 3% degrading.

Part Number	Data obtained at hot plate temperature Th=27°C				Dimension WxLxHmm		
	I _{max} (amps)	DT _{max} (°C)	V _{max} (volts)	Q _{max} (watts)	L1xW1	L2xW2	H
SM TH C2-31-17-04	4.3	91	3.8	7.0	20x20	15x15	6.8
SM TH S2-31-17-20	2.3	91	3.6	3.9	15x15	11.5x11.5	6.6
SM TH F2-59-31-02	1.7	94	6.9	4.4	18x15	12x12	5.53
SM TH C2-71-17-05	5.4	100	8.8	10.6	29.64x29.64	12.98x12.98	6.1
SM TH C2-71-31-04	4.6	92	8.2	13.6	30x30	20x20	6.9
SM TH C2-127-31-05	4.7	108	14.8	14.4	40x40	20x20	8.0
SM TH S2-127-63-02	1.6	93	14.6	9.5	29.8x29.8	14.8x29.8	7.75
SM TH C2-127-63-04	4.2	91	14.6	26.0	40x40	40x40	6.9
SM TH C2-127-63-06	5.9	90	14.6	36.0	40x40	40x40	6.4

* Just example: contact us for complete list

Part Number	Data obtained at hot plate temperature Th=27°C				Dimension WxLxHmm
	I _{max} (amps)	DT _{max} (°C)	U _{max} (volts)	Q _{max} (watts)	
SM TH S1-01715	1.7	70	2.24	2.41	10x10x4.0
SM TH S1-01720	2.9	70	2.16	3.87	11.25x11.25x3.6
SM TH S1-03115	1.7	70	3.9	4.2	12x12x4.0
SM TH S1-03120	2.1	70	3.9	5.2	12x12x3.4
SM TH S1-03125	2.8	70	3.9	6.8	15x15x4.0
SM TH S1-03130	3.7	70	3.9	9.0	15x15x3.6
SM TH S1-03139	4.7	70	3.9	11.4	15x15x3.2
SM TH S1-03540	4.1	70	4.5	11.3	20x10x3.6
SM TH S1-03850OD24ID9.8	5.8	70	4.7	17.1	24x9.8x3.1
SM TH S1-04720CR1.5	2.5	70	5.9	9.2	23x23x3.0
SM TH S1-04920	2.5	70	6.1	9.6	23x23x3.0
SM TH S1-05350	5	70	6.8	21.4	12x36x3.2

* Just example: contact us for complete list

SM TH C2 Series:

* the multistage (Cascade) thermoelectric modules with larger temperature difference

Typical applications:

- * Photonic instrument
- * Medical instrument
- * Scientific instrument

SM TH S1 Series:

* thermoelectric modules for lower current and heat pumping application

Typical applications:

- * CPU cooler
- * Scientific instrument

If you did not find thermoelectric module that meets your requirements, ask for custom modification.

