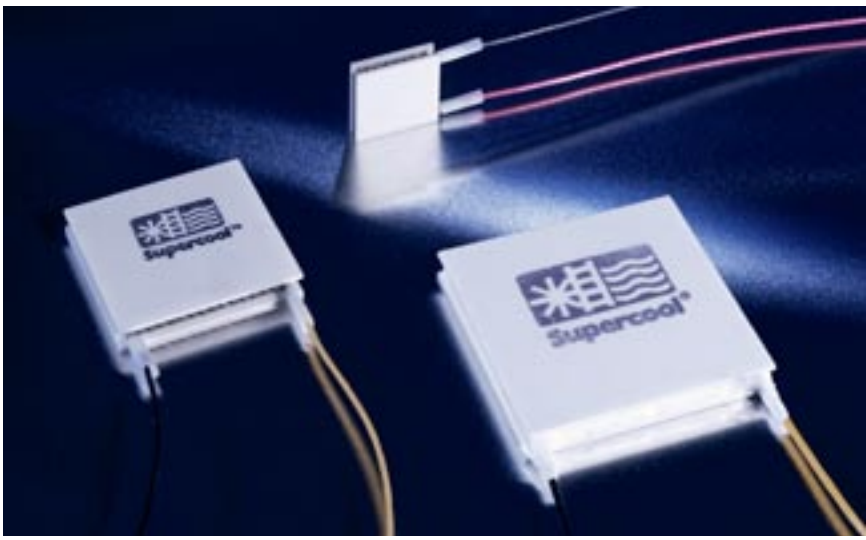
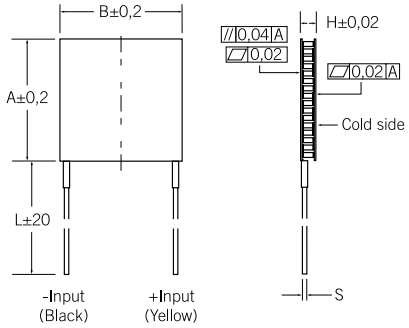
High temperature modules

Supercool's high temperature modules deliver not only long-term operation up to 150°C, but also outstanding cooling performance (Max. ΔT = 73°C at T_{hot} = 25°C).

Although we boast a modest standard range, we can, in principle, supply all modules as high temperature modules should your application call for high volumes.





- *High temperature modules feature Teflon (PTFE) insulated lead wires.*
- *R_{AC} tolerance = ±10%*
- *Tolerance of I_{max}, U_{max}, Q_{max} = ±5%*

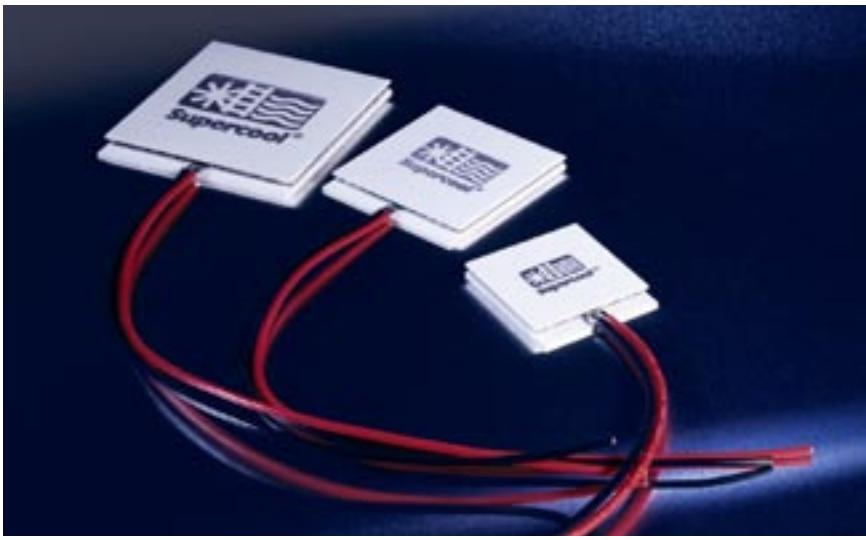
Product No.	I_{max} (A)	U_{max} (V)	$P_{c\,max}$ (W)	ΔT_{max} (°C)	R_{AC} (ohm)	(mm) A	B	H	L	S mm²
High temperature modules										
PF-031-10-13	3.9	3.8	8.0	73	0.91	15	15	3.6	200	0.20
PF-071-10-13	3.9	8.8	20.9	73	1.97	20	20	3.6	200	0.20
PF-071-14-15	6	8.8	32.8	73	1.32	30	30	3.9	200	0.35
PF-127-10-13	3.9	15.7	37.4	73	3.47	30	30	3.6	200	0.20
PF-127-10-20	2.6	15.7	24.9	74	5.7	30	30	4.3	200	0.20
PF-127-14-11	8.5	15.7	81.0	71	1.52	40	40	3.8	300	0.50
PF-127-14-15	6	15.7	58.6	73	2.19	40	40	3.9	300	0.35
PF-127-14-25	3.9	15.7	38.1	74	3.42	40	40	4.8	350	0.35
PF-127-14-11-S [1]	8.5	15.7	77.6	69	1.52	40	40	3.8	300	0.50
PF-127-14-15-S [1]	6	15.7	56.1	71	2.19	40	40	3.9	300	0.35
PF-127-14-25-S [1]	3.9	15.7	36.6	72	3.42	40	40	4.8	350	0.35

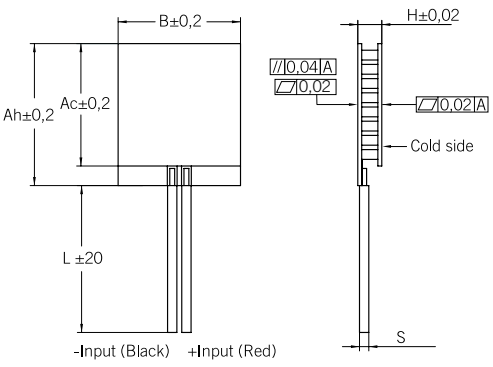
[1] S = Silicon sealed versions.

Power modules

Power modules are for applications where you need to pump a great amount of heat onto a small surface. We offer power density of up to 14 W/cm². These TEMs also provide outstanding thermal cycling properties and can be used for applications such as lasers, PCR cycling and thermal testing of microprocessors.

By powering the TEMs to around half of U_{max} you can use these modules to achieve exceptionally high efficiency (COP). The porch style offers a strong lead attachment. Operating temperature is max. 120°C.





- *Power modules feature Teflon (PTFE) insulated lead wires.*
- *R_{AC} tolerance = ±10%*
- *Tolerance of I_{max}, U_{max}, Q_{max} = ± 5%*

Product No.	I_{max} (A)	U_{max} (V)	$P_{c\,max}$ (W)	ΔT_{max} (°C)	R_{AC} (ohm)	(mm) Ac	Ah	B	H	L	S mm²
Power modules											
PC-128-10-05	9	15.8	88.2	68	1.38	30	34	30	2.5	200	0.50
PC-072-14-06	15.4	8.9	85.1	68	0.45	30	34	30	3.3	200	0.75
PC-128-14-06	15.4	15.8	151.4	68	0.82	40	44	40	3.3	300	0.75
PC-128-20-08	24	15.8	235.5	70	0.55	55	59	55	4.0	200	0.75
PC-200-14-06	15.4	25.0	236.5	68	1.28	40	44	40	3.3	200	0.75
PC-200-14-11	8.5	24.9	127.5	71	2.36	40	44	40	3.8	200	0.50
PC-288-10-05	9	35.8	198.4	68	3.11	40	44	40	2.5	200	0.50
PC-288-10-08	6	35.8	127.6	71	4.83	40	44	40	3.1	200	0.50
PC-288-14-06	15.4	35.8	340.5	68	1.84	52	56	52	3.3	200	0.75
PC-288-14-11	8.5	35.8	182.6	71	3.39	52	56	52	3.8	200	0.5