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MODEL: CP050-153031 | DESCRIPTION: PELTIER MODULE

FEATURES

- silicone sealed
- wide ΔT max
- low profile
- precise temperature control
- solid state construction

RoHS

SPECIFICATIONS

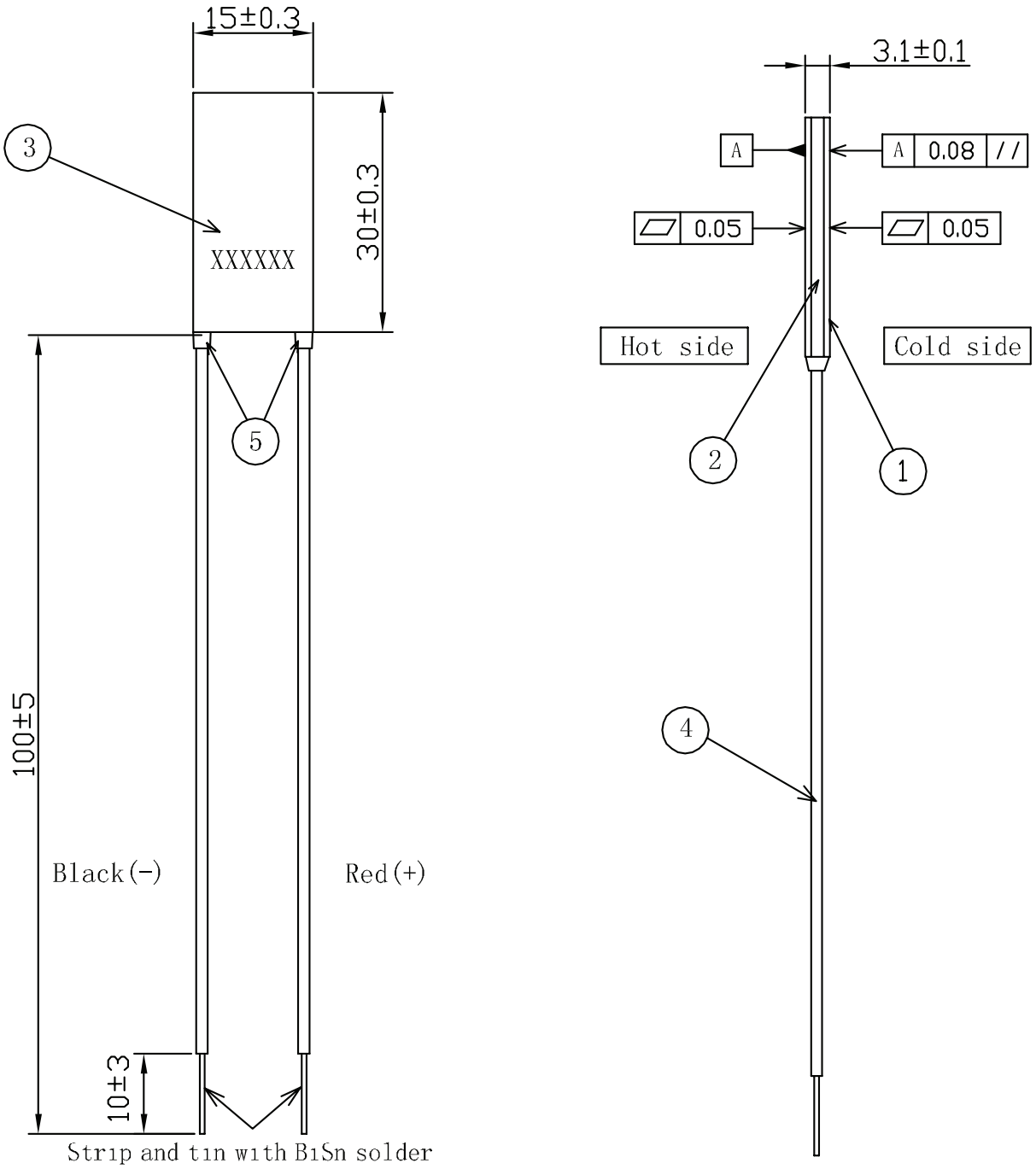
parameter	conditions/description	min	typ	max	units
input voltage[1]				12	V
input current[2]				5	A
internal resistance[3]		1.65	1.83	2.01	Ω
Qmax[4]	Th = 27°C Th = 50°C			34.6 38	W W
ΔTmax[5]	Th = 27°C Th = 50°C			68 75	°C °C
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				100	°C
RoHS	yes				

Notes:
1. Maximum voltage at ΔT max and T_h=27°C
2. Maximum current to achieve ΔT max
3. Measured by AC 4-terminal method at 25°C
4. Maximum heat absorbed at cold side occurs at I_{max}, V_{max}, and ΔT=0°C
5. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0 W (ΔT max measured in a vacuum at 1.3 Pa)

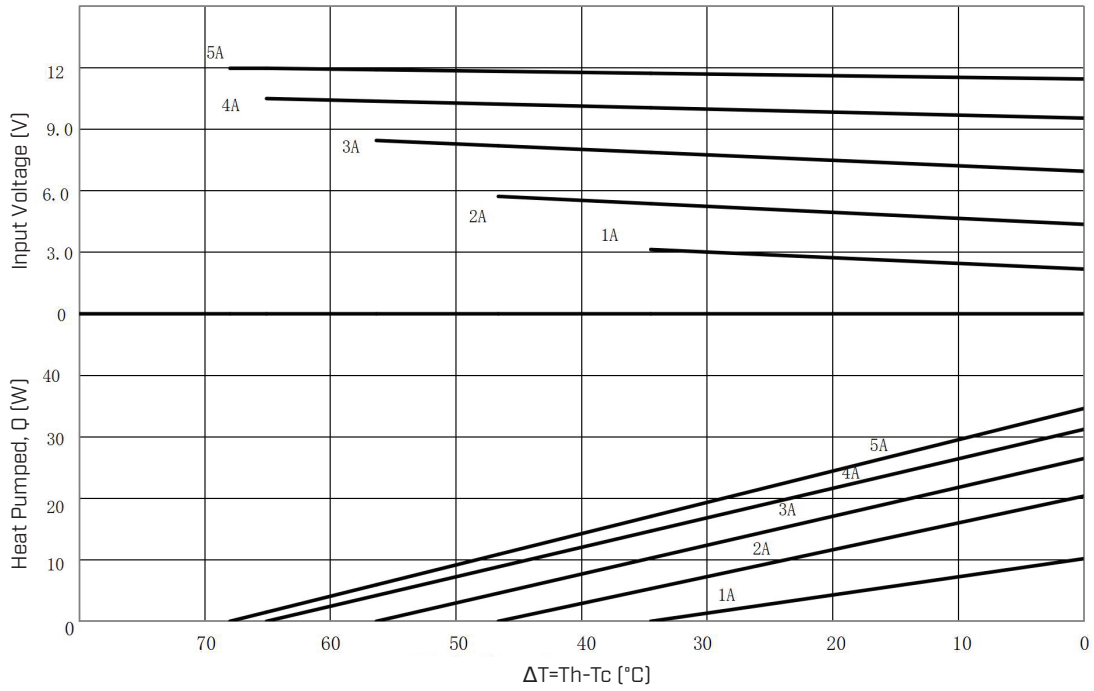
MECHANICAL DRAWING

units: mm

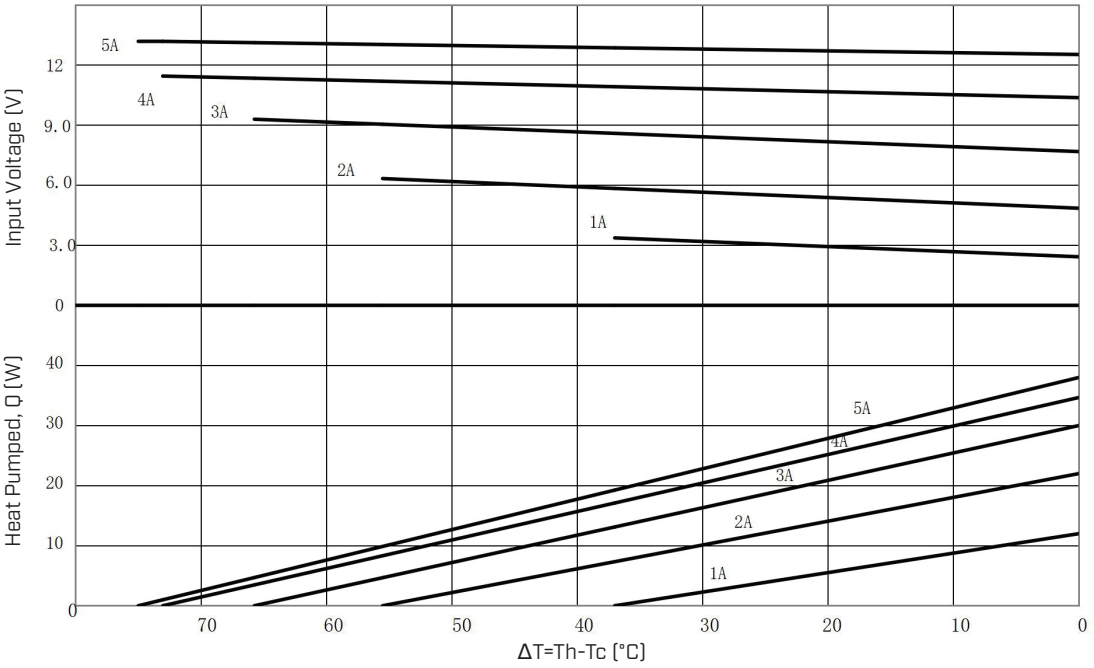
ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	ceramic plate	96% AL_2O_3	white
2	sealer	silicon rubber 703 RTV (between cold and hot side plates)	
3	marking	P/N & S/N printed on cold side surface	
4	wire leads	24 AWG (105°C max)	tin
5	joint cover	silicon rubber 703 RTV	



PERFORMANCE (Th=27°C)



PERFORMANCE (Th=50°C)



REVISION HISTORY

rev.	description	date
1.0	initial release	10/24/2024

The revision history provided is for informational purposes only and is believed to be accurate.

same sky

Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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