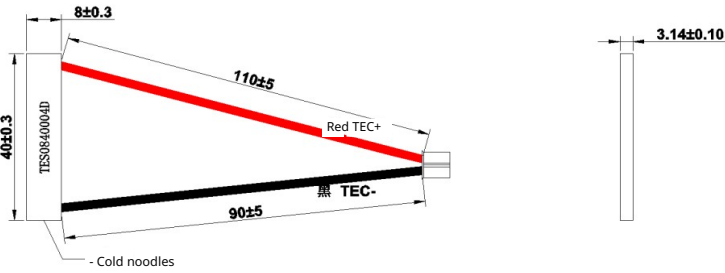


Performance Parameters:

Model: TES-08*40*3.1mm	Part Number:	TES0840004D
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Product Image:



Reference Image

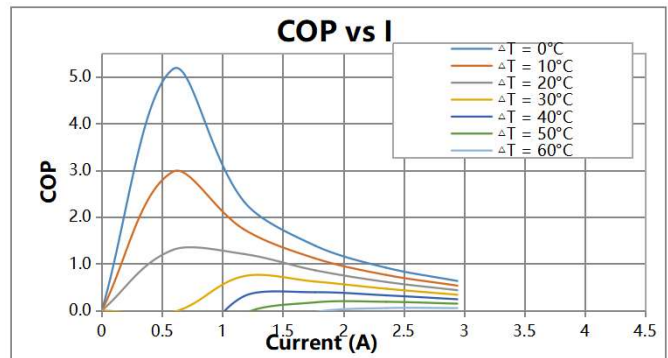
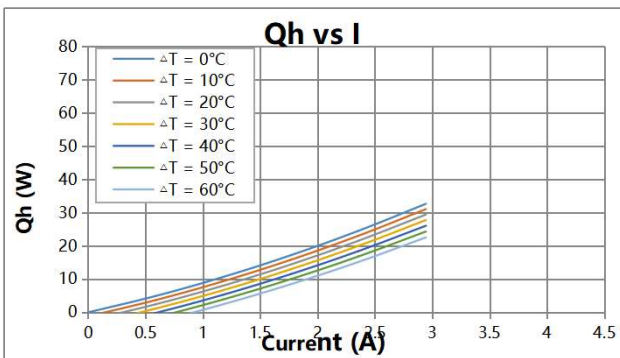
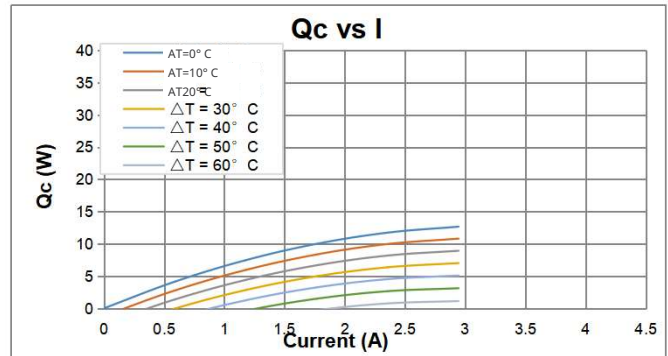
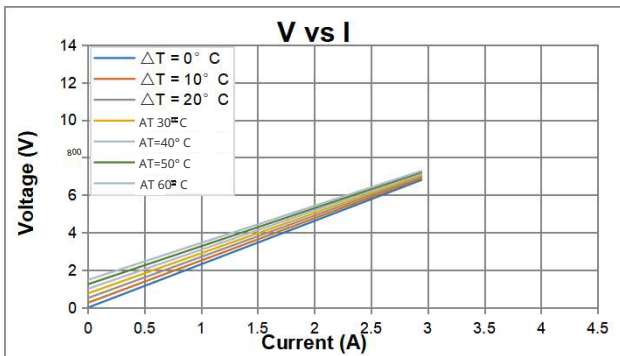
Marking:

- Ceramic substrate: alumina
- Wire length: Customizable per customer
- External terminals: Customizable per customer
- Cold-face printing: Part number + Date code (XXXX/Year-Month)
- Encapsulation material: 704 silicone (white)

Maximum Ratings And Electrical Characteristics

Performance Parameters(Vacuum)			
Name	Th = 25°C	Th = 50°C	Note
Vmax (V)	7.35 8.24	Maximum voltage	supplied to the product
Imax (A)	2.94 2.93	Maximum current	supplied to the product
ΔT_{max} (°C)	≥ 60 71	Maximum temperature difference	
AC Resistance (ohms)	2.078 ~ 2.540	2.60 DC resistance	(product qualification testing standard)
Qmax (W)	12.66 13.77	Maximum cooling capacity	

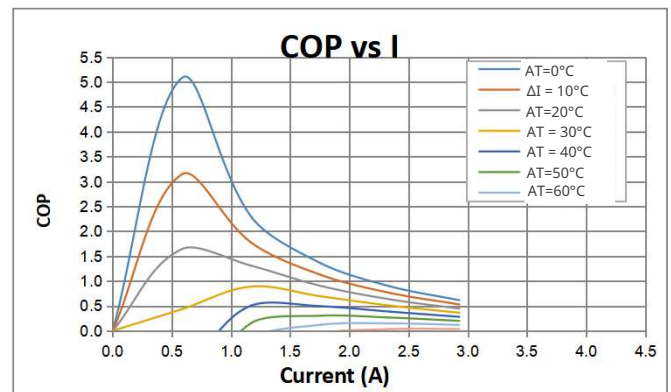
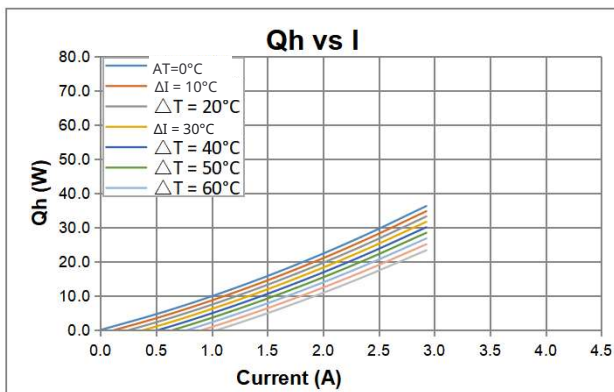
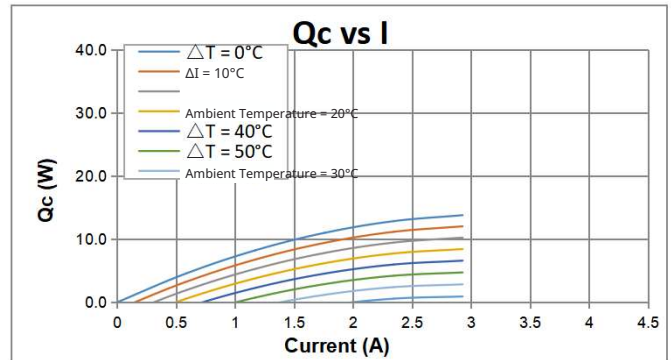
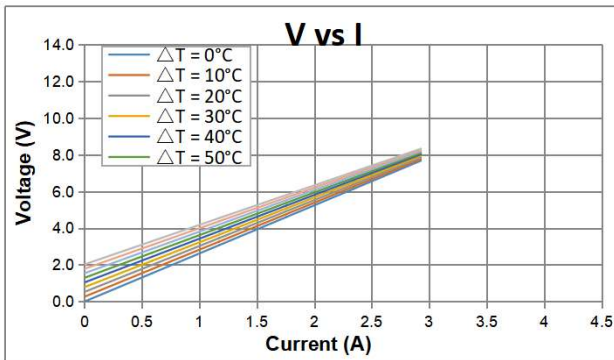
Performance Curves Th=25°C



Remarks: Notes:

- I: Input current V: Input voltage
- Qc: Cooling Capacity Qh: Heating Capacity
- COP: Coefficient of Performance

Performance Parameters: Performance Curves Th=50°C



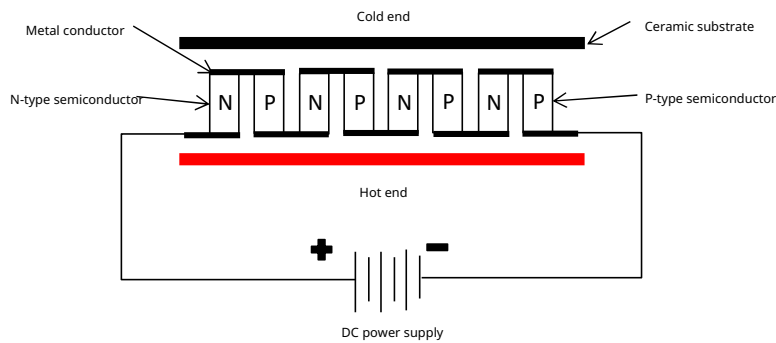
Remarks: Notes:

I: Input current V: Input voltage

Qc: Cooling Capacity Qh: Heating Capacity

COP: Coefficient of Performance

Working Principle Diagram 工作原理图



TEC utilizes the Peltier effect of semiconductor materials. When a DC power supply passes through the P/N junction, both ends of the P/N junction can simultaneously absorb and dissipate heat, achieving cooling or heating.

Precautions For Use

1. Low temperature operating environment: -55°C to 80°C ; Medium temperature operating environment: -55°C to 150°C ; High temperature operating environment: -55°C to 200°C .
2. The red lead typically indicates the positive polarity, and the black lead indicates the negative polarity. The power supply should be a DC power supply with ripple coefficient less than 10%.
3. Typically, the marked side of the product is the cold face, and the unmarked side is the hot face.
4. During installation: Clean both sides of the product, and uniformly apply a layer of thermal grease or attach a thermal silicone pad to the cold and hot faces respectively. The heatsink in contact with the product should also be evenly coated with thermal grease to ensure full contact.
5. During installation: A thermal insulation material should be applied to the heatsink to prevent heat transfer from the hot face to the cold face, which would affect cooling performance.
6. During installation: If screws are used for fastening, tighten them evenly (diagonal tightening). Do not overtighten or apply uneven force, as this may crack the crystals and cause product failure.