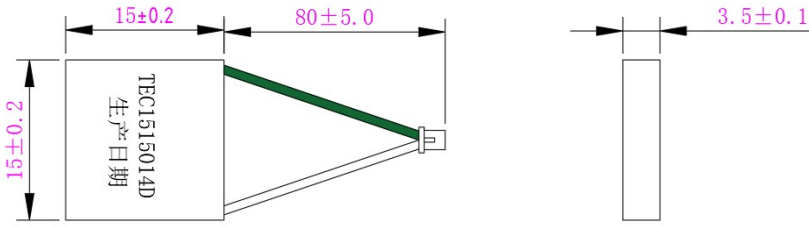


Performance Parameters:

Type/Model: TEC-15×15×3.5 mm	Part Number: TEC1515014D
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Product Image:



Reference Image

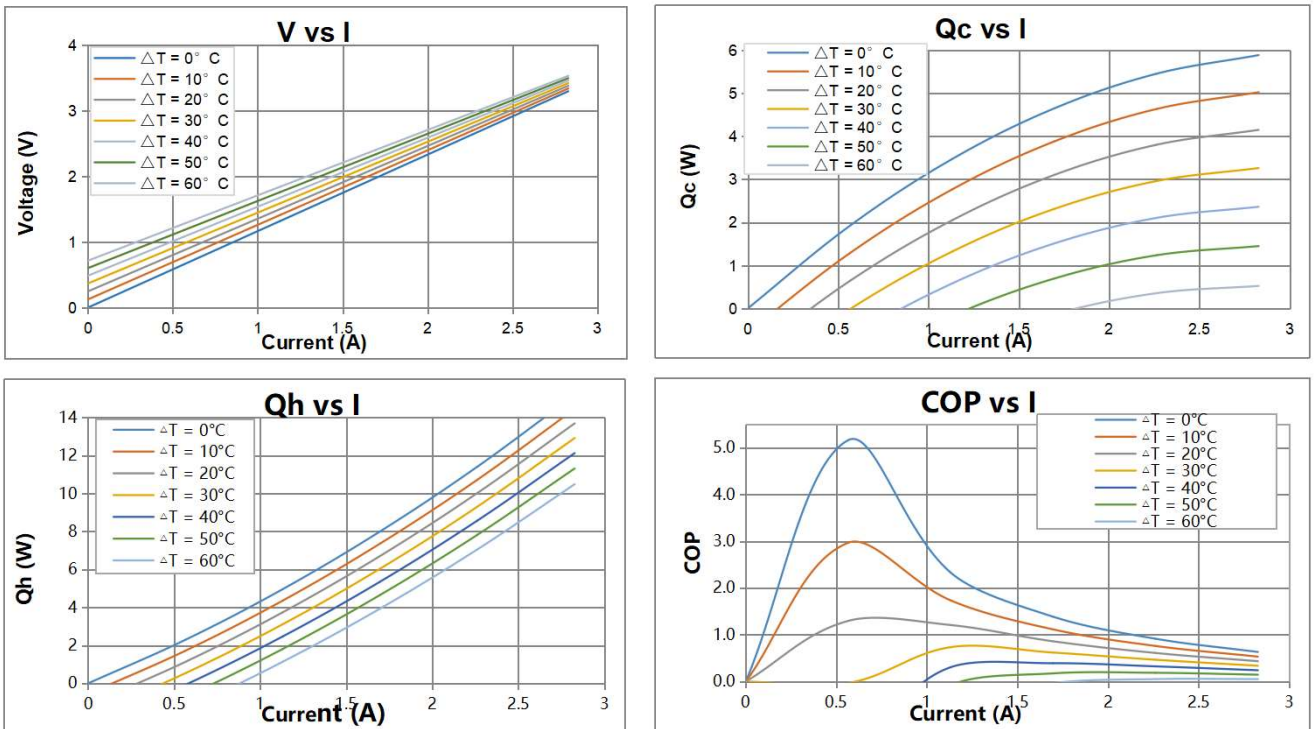
Marking:

- Ceramic Substrate: Aluminum Oxide
- Lead Wire Length: Custom by customer
- External Terminals: Custom by customer
- Laser/Cold-face Printing: Part number + Date code (XXXX/YYYYMM)
- Encapsulation Material: 704 Silicone (White)

Maximum Ratings And Electrical Characteristics

Performance Parameters(Vacuum)			
Name	Th=25°C	Th=50°C	Note
Vmax (V)	3.56 3.99	Maximum voltage	provided to the product
Imax (A)	2.83 2.81	Maximum current	provided to the product
ΔTmax (°C)	≥60 71	Maximum temperature difference	
AC Resistance (ohms)	1.000 ~ 1.300	1.31 DC resistance	(product qualification testing standard)
Qmax (W)	5.89 6.41	Maximum cooling power	

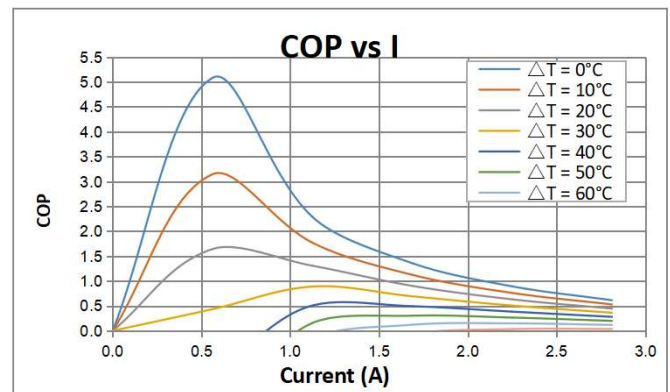
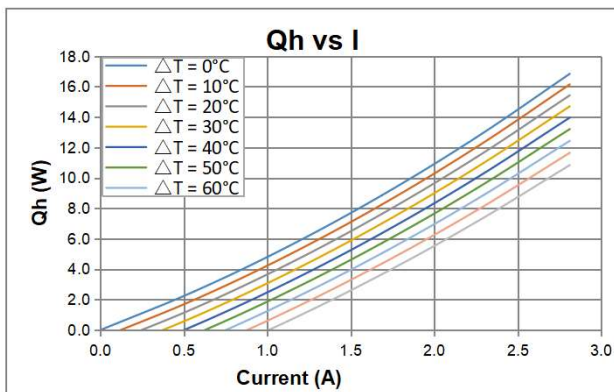
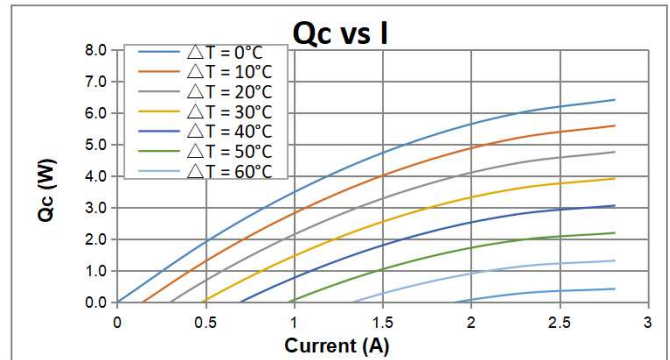
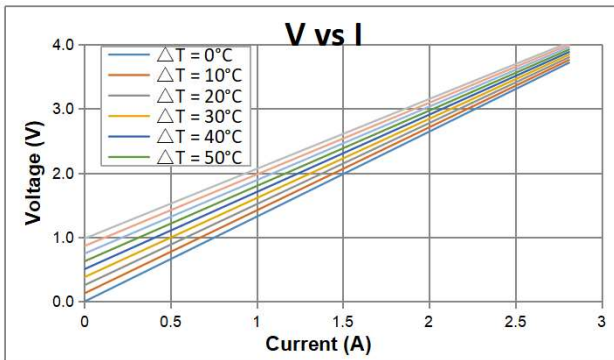
Performance Curves Th=25°C



Remarks:

I : Input current V : Input voltage Qc: Quantity Cooling (cooling capacity)
 Qh: Heating quantity (heat rejection) COP: Coefficient of Performance

Performance Parameters: Performance Curves Th=50°C

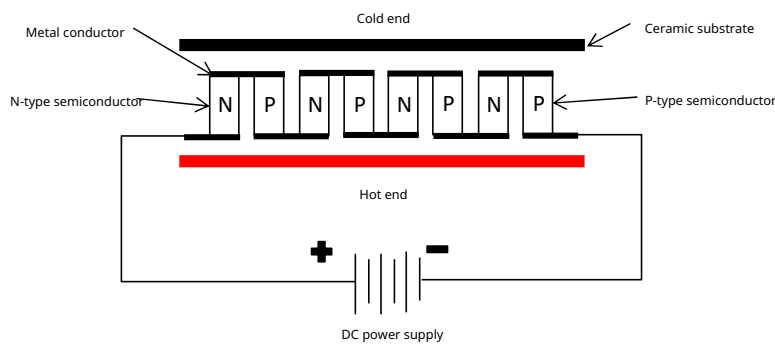


Remarks:

I : Input current V : Input voltage Qc: Quantity Cooling (cooling capacity)

Qh: Heating quantity (heat rejection) COP: Coefficient of Performance

Working Principle Diagram



A thermoelectric cooler (TEC) uses the Peltier effect of semiconductor materials. When a direct current passes through the P/N junction, heat is absorbed at one end and released at the other, 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 terminal, and the black lead indicates the negative. The power supply should be a DC power supply with a ripple factor of less than 10%.
3. In most cases, the imprint side of the product is the cold side, and the non-imprint side is the hot side.
4. During installation: wipe both sides of the product clean, and evenly apply a layer of thermal grease or attach a thermal silicone pad on the cold and hot surfaces; the heatsink in contact with the product should also be evenly coated with thermal grease, ensuring full contact.
5. During installation: the heatsink should be attached with insulating material to prevent heat-side temperature from transferring to the cold side, which would affect the product's cooling performance.
6. During installation: if screws are used for fastening, they should be tightened evenly (diagonally); never over-tighten or apply uneven force, which can easily cause crystal damage and lead to product malfunction.