

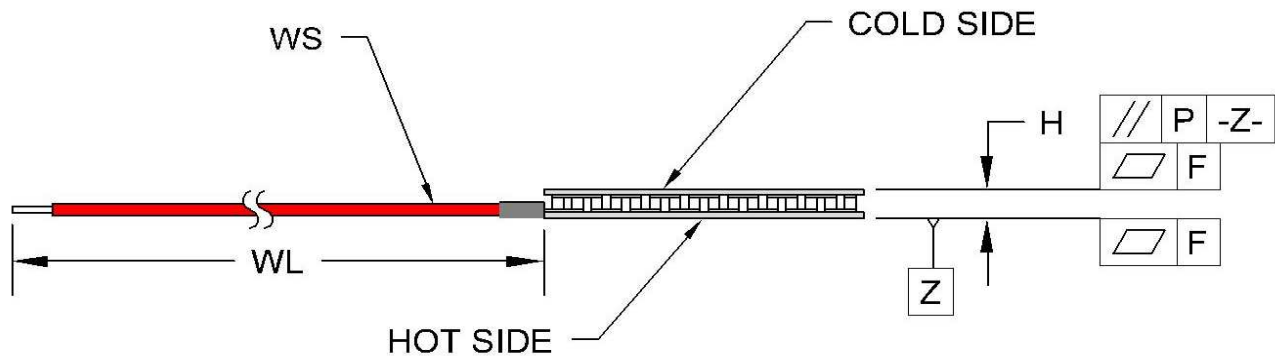
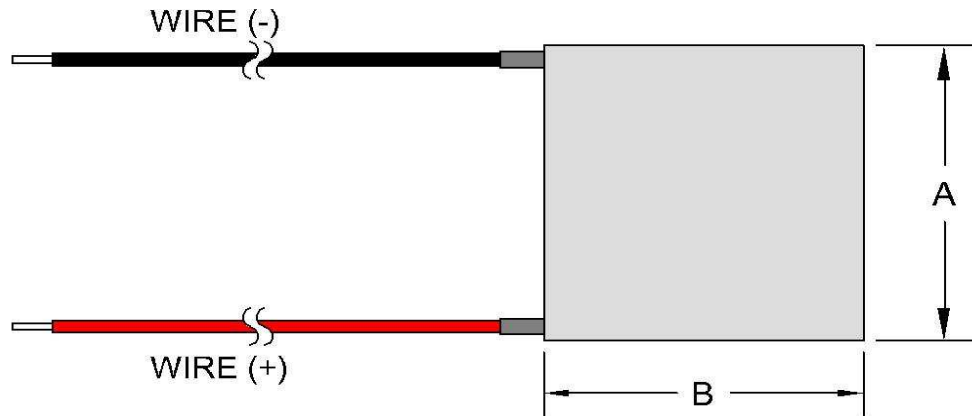
**HP-199-1.4-1.5
Thermoelectric Module
(Peltier Module)
Specifications**

	Material Specifications (27 °C hot side temperature)	Material Specifications (50 °C hot side temperature)
Vmax (V)	24.9	27.6
I _{max} (A)	6.1	6.1
Q _{max} (W)	94.0	103.1
DT _{max} (°C)	70	79
Operation/storage temperature	-40 °C to +80 °C	

Module *material* specifications are nominal values based on the hot-side temperature indicated. Thermoelectric material parameter tolerance is +/-10%.

In no case should the module temperature be allowed to exceed its maximum operation/storage temperature.

Please review all product and technical information, *Thermoelectric Module Mounting Procedure*, parameter definitions, FAQ's, and ordering information posted on our website before purchasing or using this product.



Width, A (mm)	40 +0.5/-0.2
Width, B (mm)	40 +0.5/-0.2
Height, H (mm)	4.1 ±0.05
Flatness, F (mm)	0.02
Parallelism, P (mm)	0.03
Wire Size, WS (mm ²)	0.35
Wire Length, WL (mm)	120

Optional Features and Notes:

Add "P" to part number for sealing module with epoxy potting.

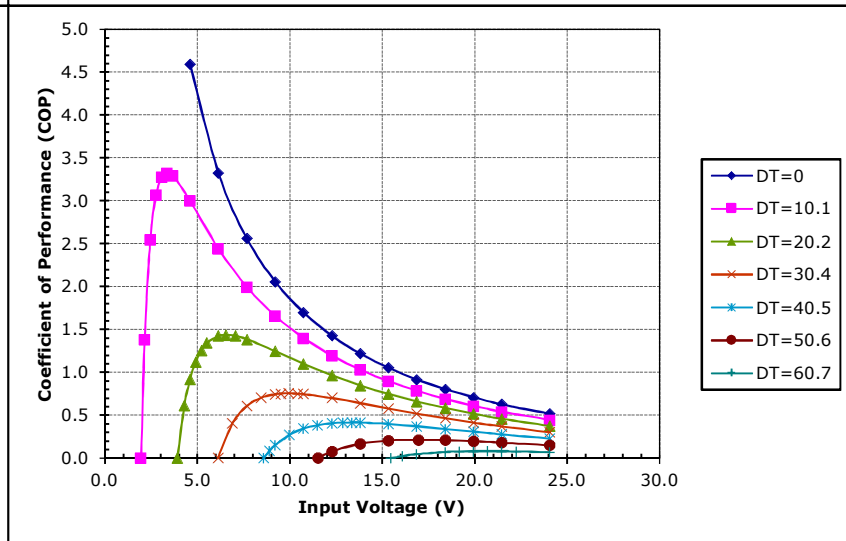
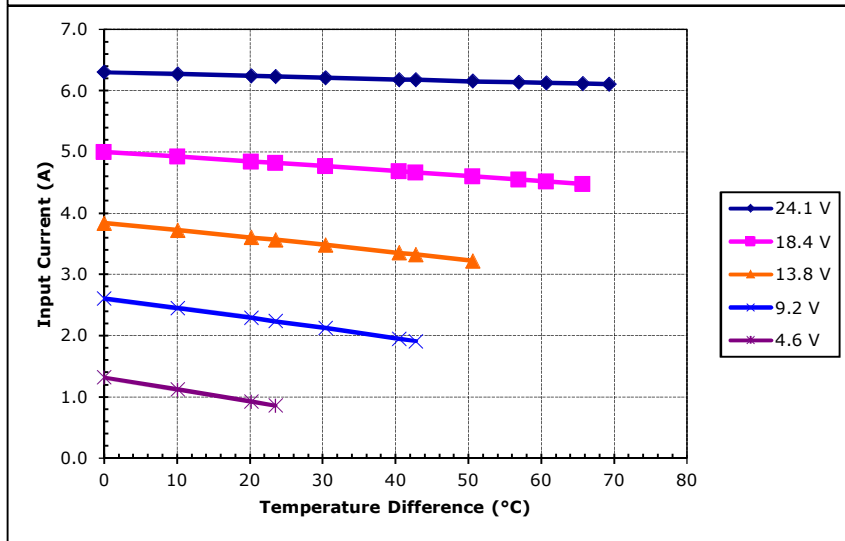
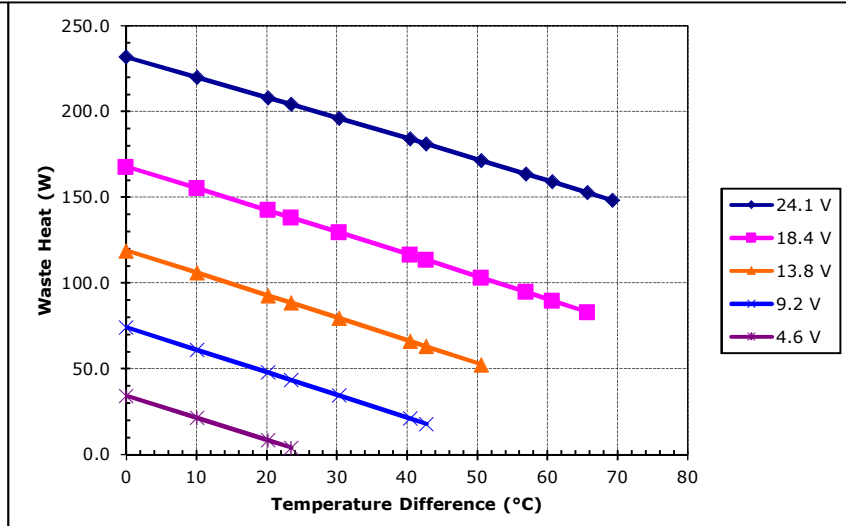
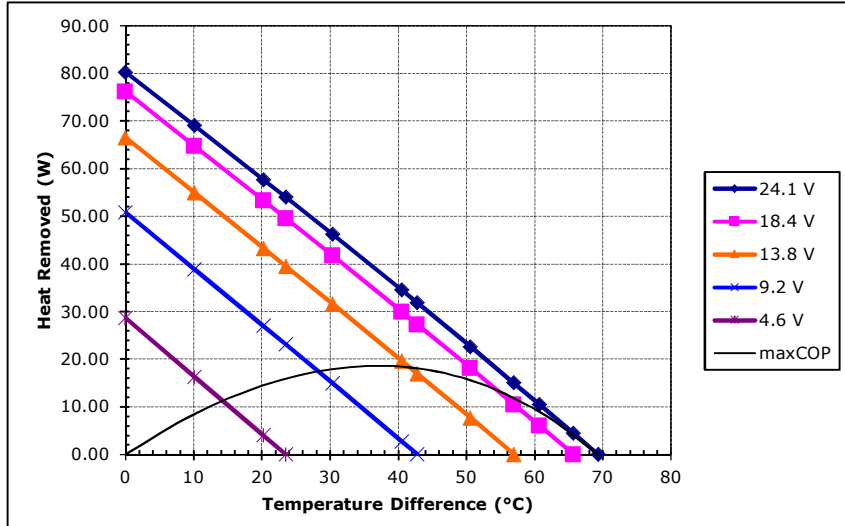
Performance graphs include thermal resistance of substrates.

RoHS Compliant

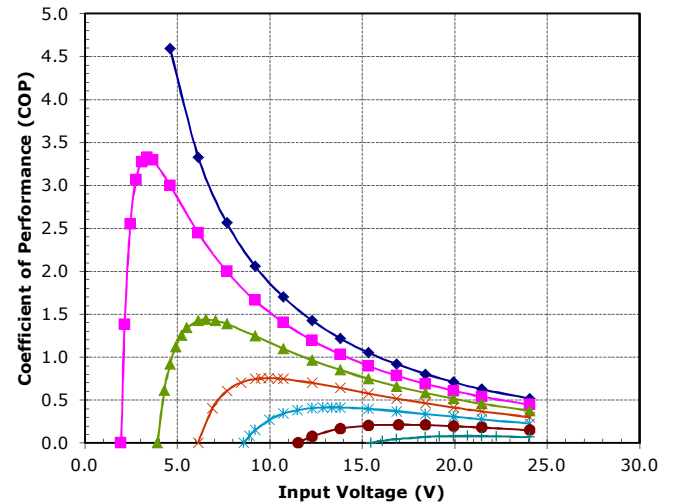
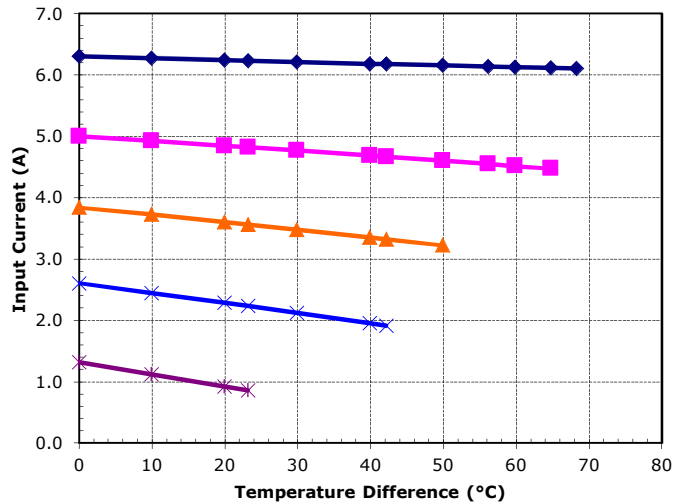
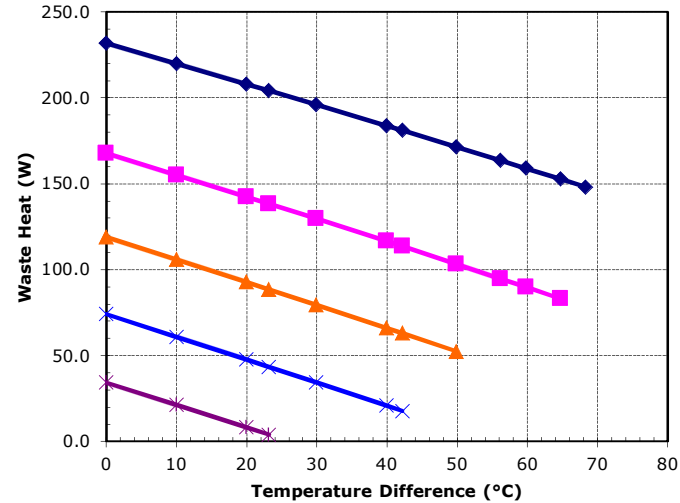
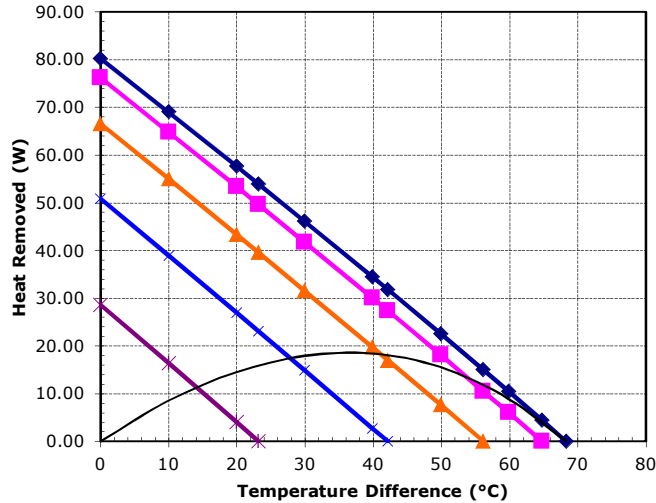
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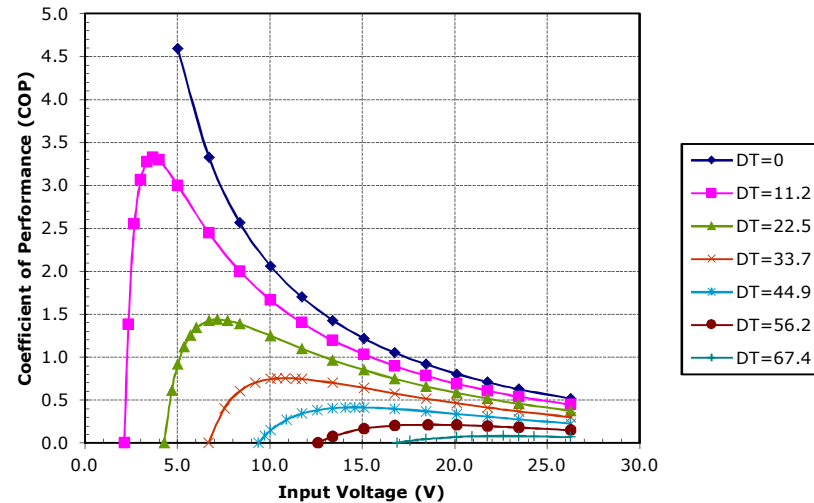
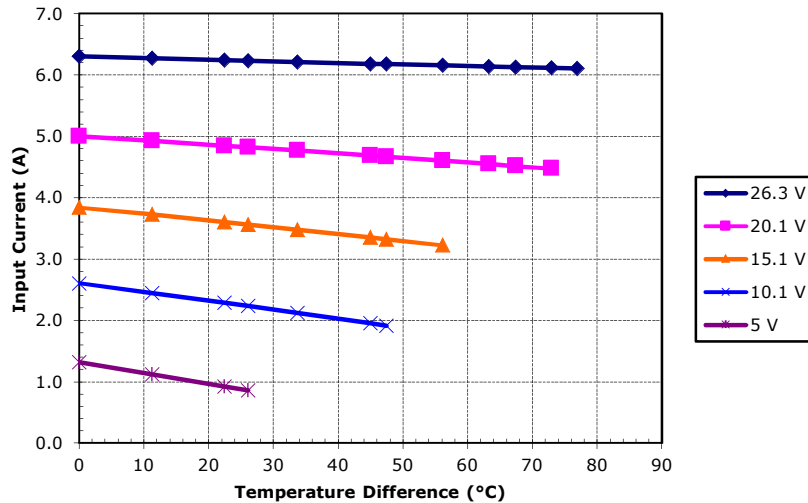
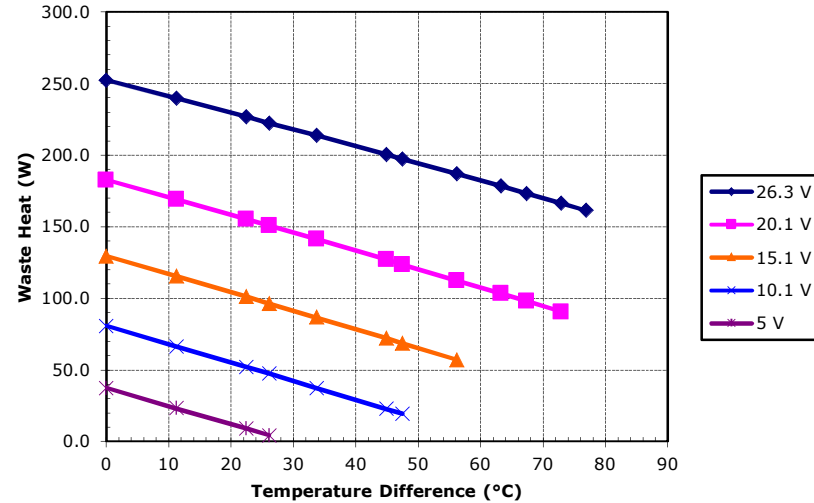
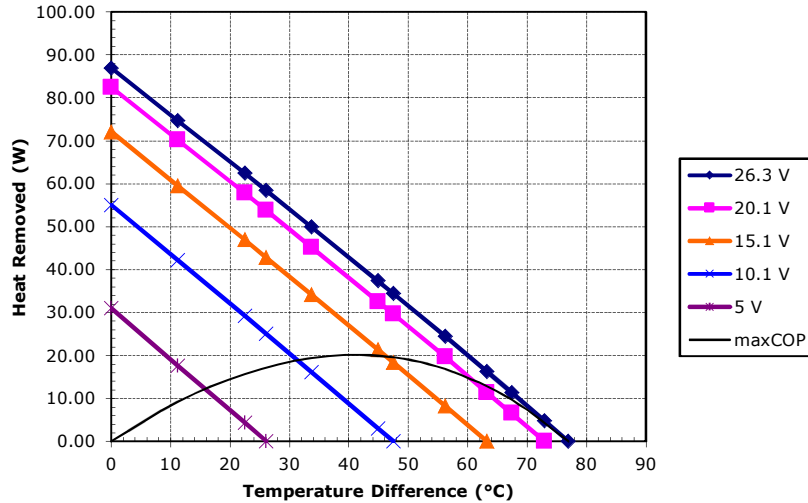
Expert Engineering, Precision Manufacturing: *Quality Thermal Solutions Delivered*



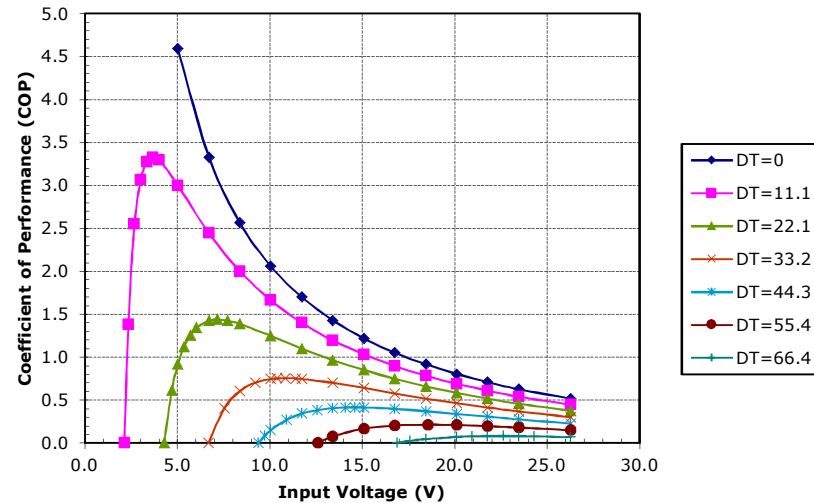
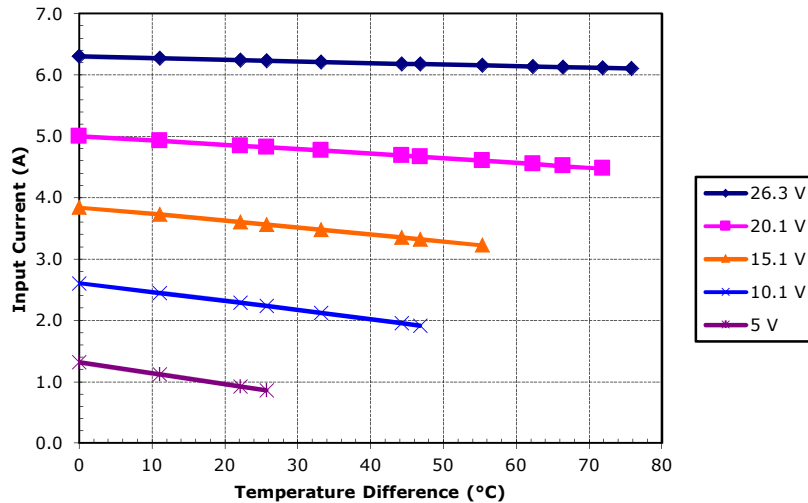
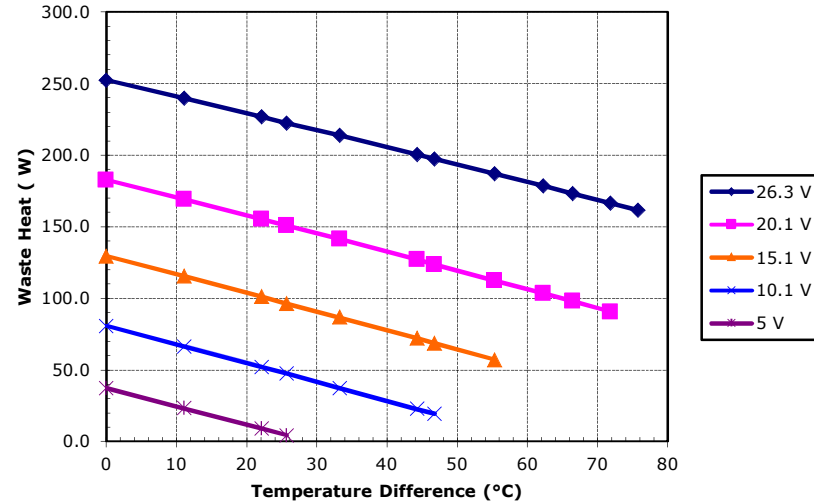
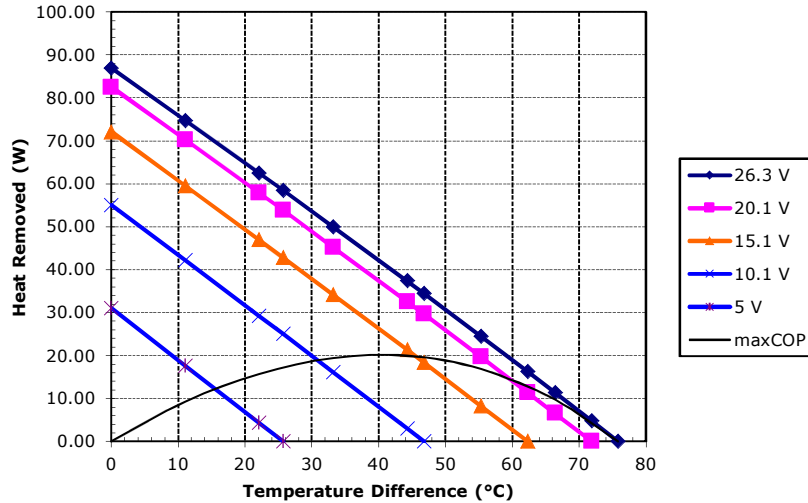
Unpotted HP-199-1.4-1.5 at a hot-side temperature of 30 °C



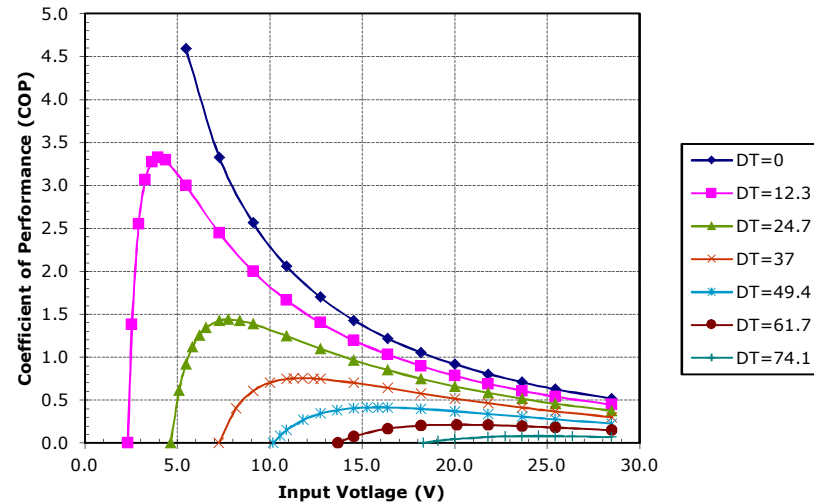
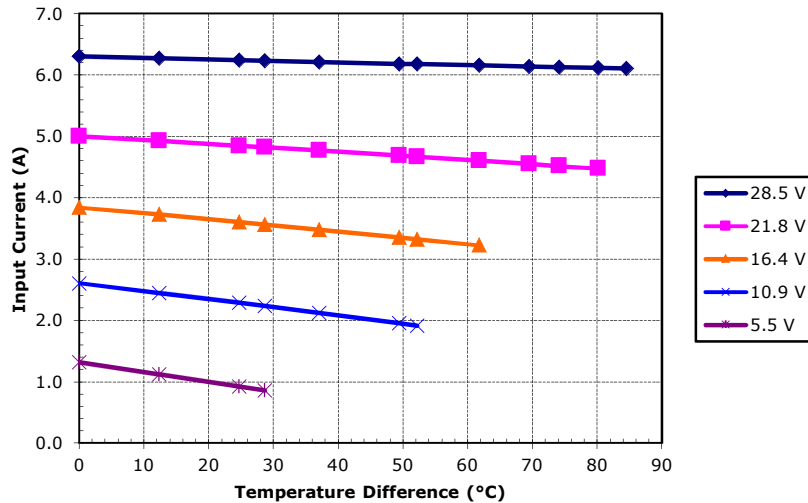
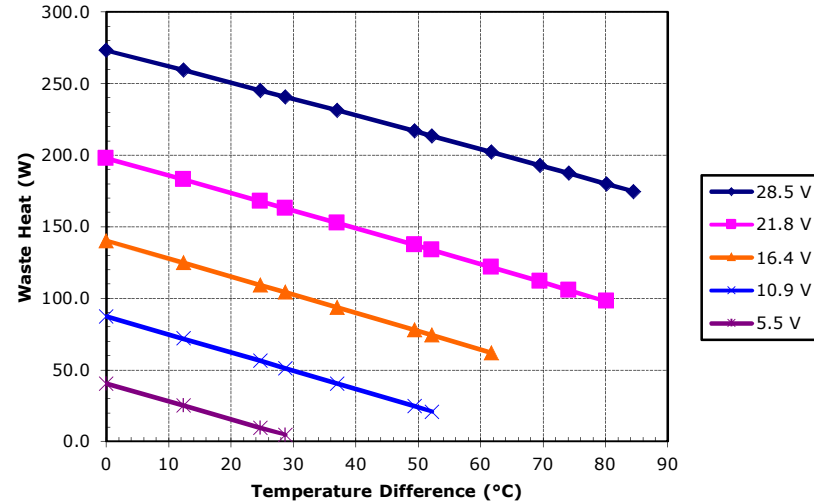
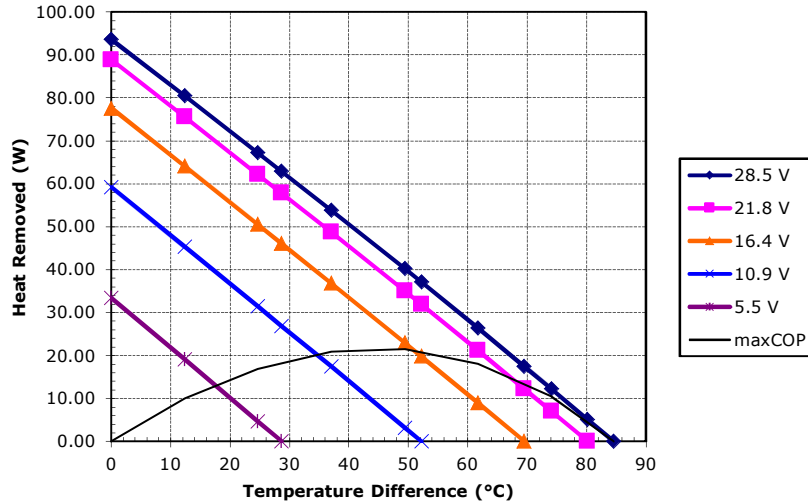
Potted HP-199-1.4-1.5 at a hot-side temperature of 30 °C



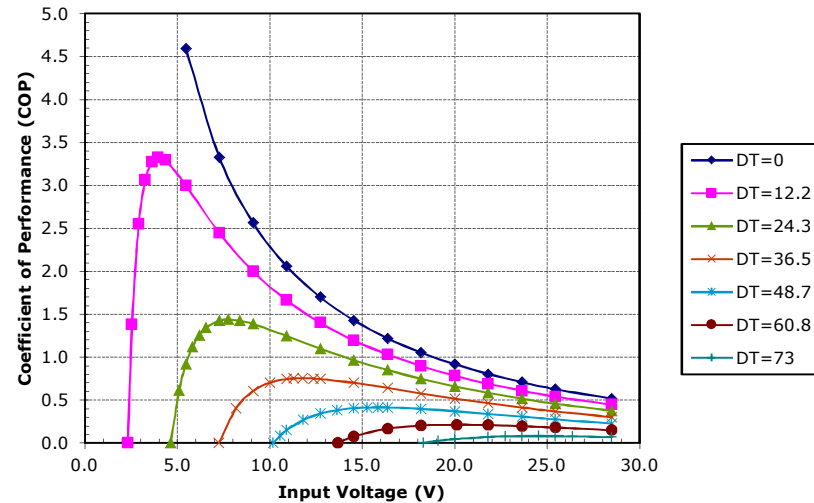
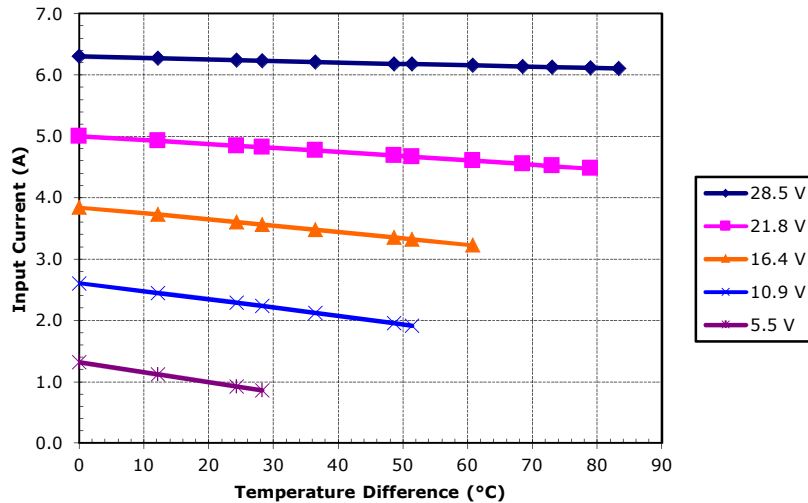
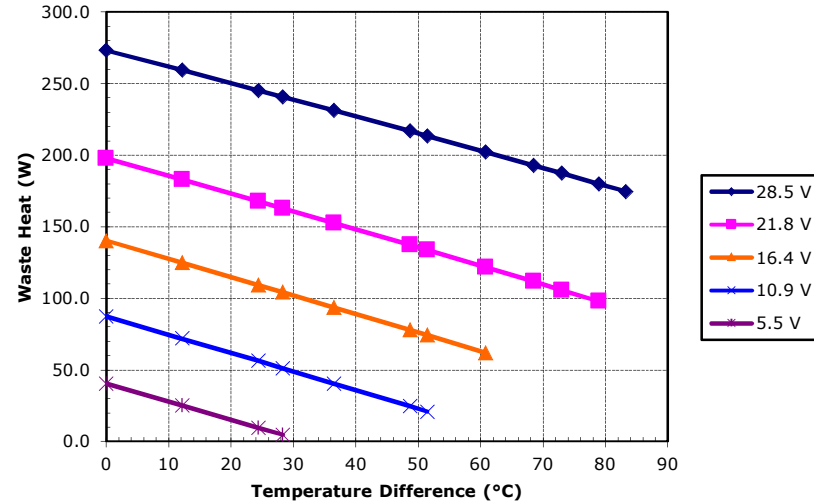
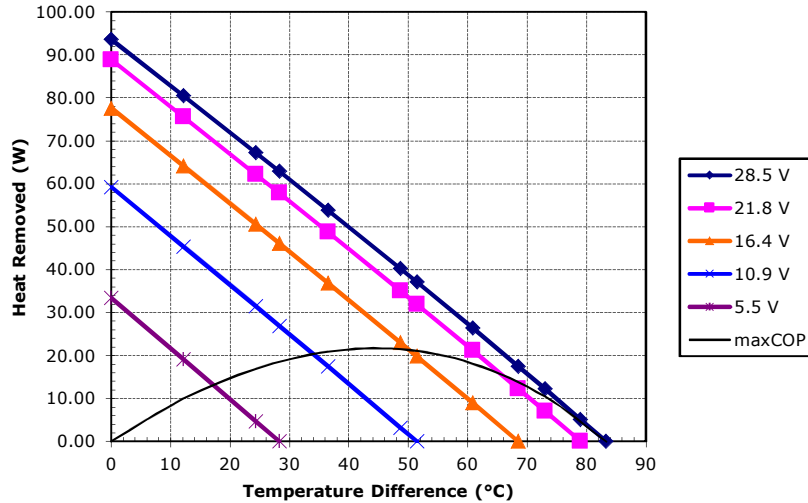
Unpotted HP-199-1.4-1.5 at a hot-side temperature of 50 °C



Potted HP-199-1.4-1.5 at a hot-side temperature of 50 °C



Unpotted HP-199-1.4-1.5 at a hot-side temperature of 70 °C



Potted HP-199-1.4-1.5 at a hot-side temperature of 70 °C