

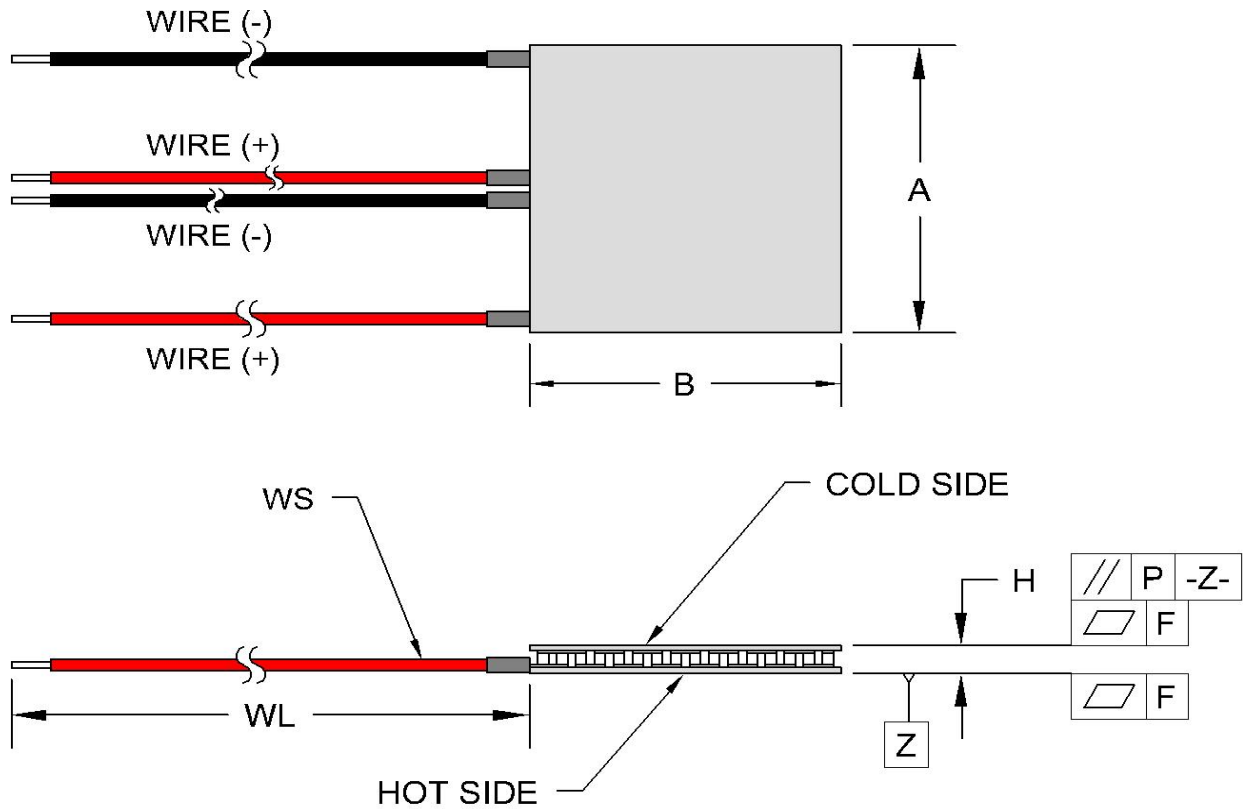
**SP-254-1.0-1.3 (Series)
Thermoelectric Module
(Peltier Module)
Specifications**

| | Material Specifications (27 °C hot side temperature) | Material Specifications (50 °C hot side temperature) |
|-------------------------------|---|---|
| Vmax (V) | 31.4 | 34.8 |
| I _{max} (A) | 3.6 | 3.6 |
| Q _{max} (W) | 70.0 | 76.8 |
| DT _{max} (°C) | 69 | 78 |
| 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) | 3.6 ±0.05 |
| Flatness, F (mm) | 0.02 |
| Parallelism, P (mm) | 0.03 |
| Wire Size, WS (mm ²) | 0.34 |
| Wire Length, WL (mm) | 120 |

Optional Features and Notes:

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

Module can be configured in parallel mode as well.

Performance graphs include thermal resistance of substrates.

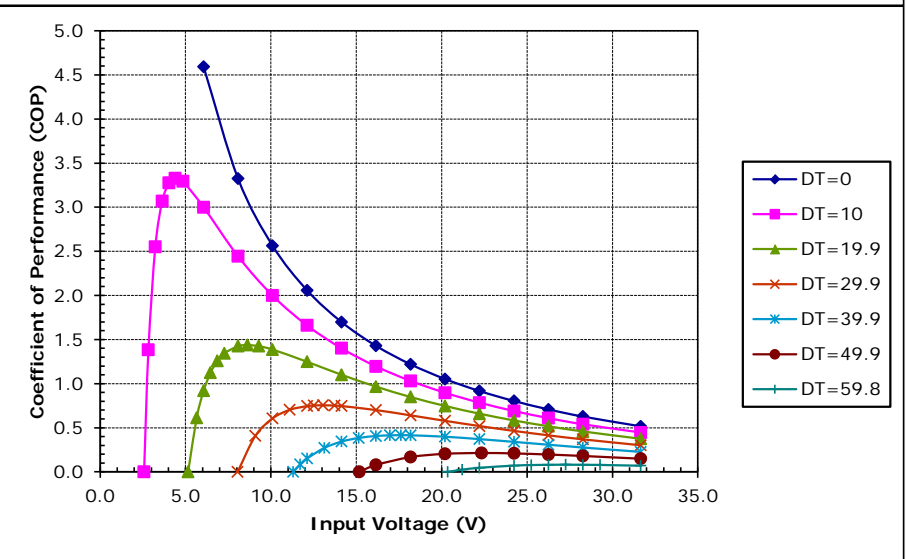
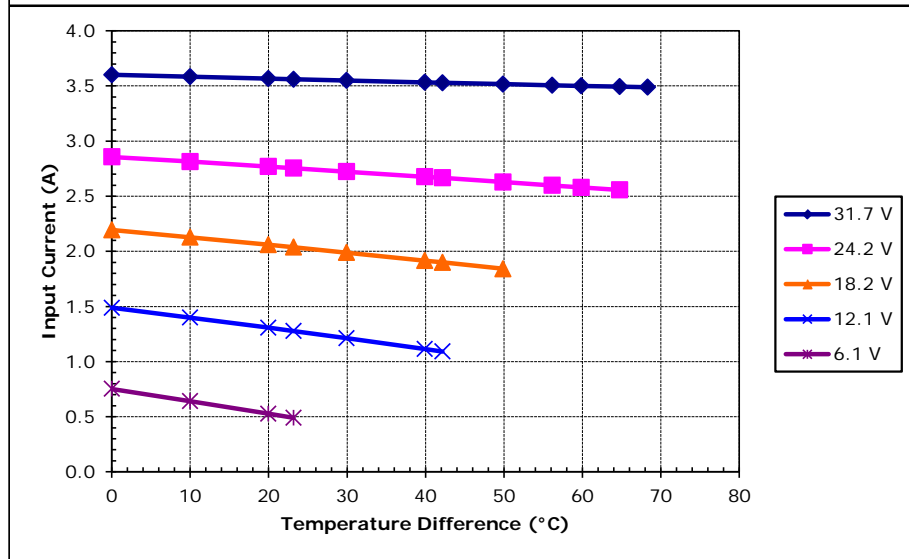
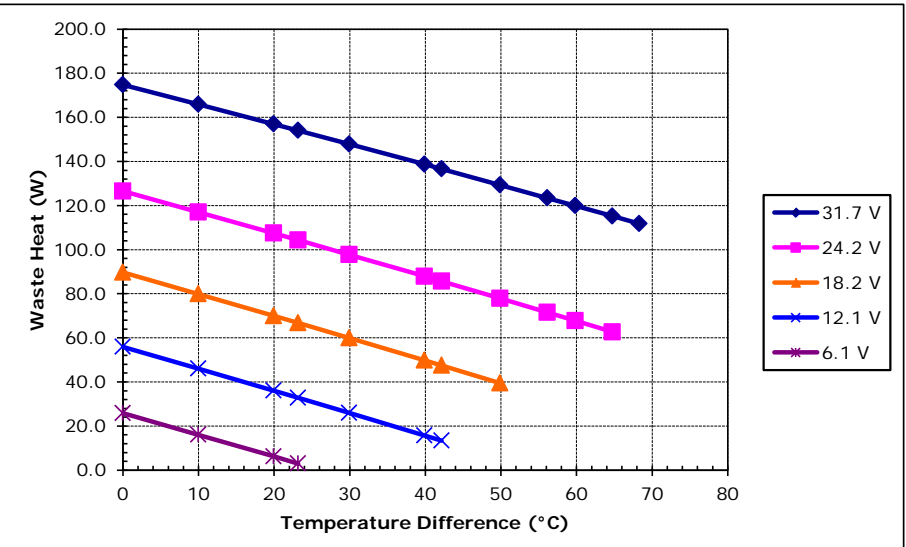
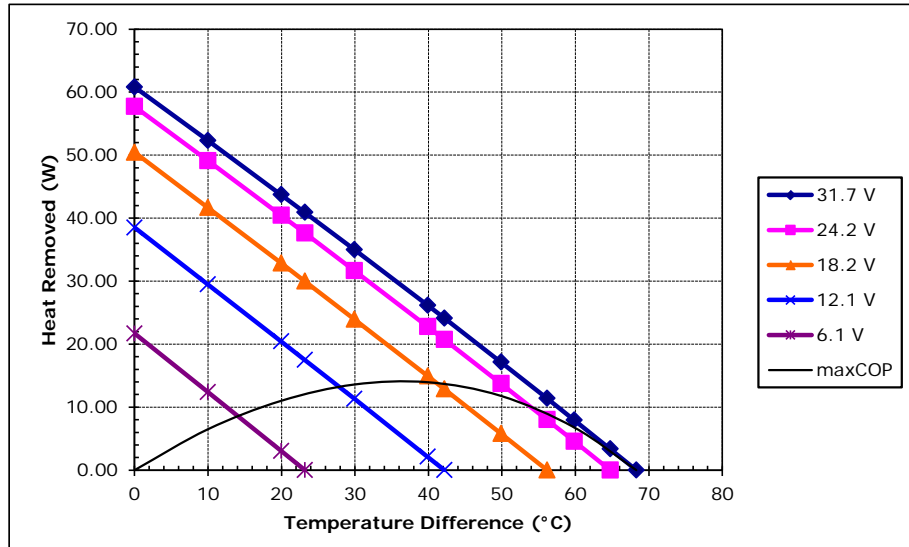
RoHS Compliant

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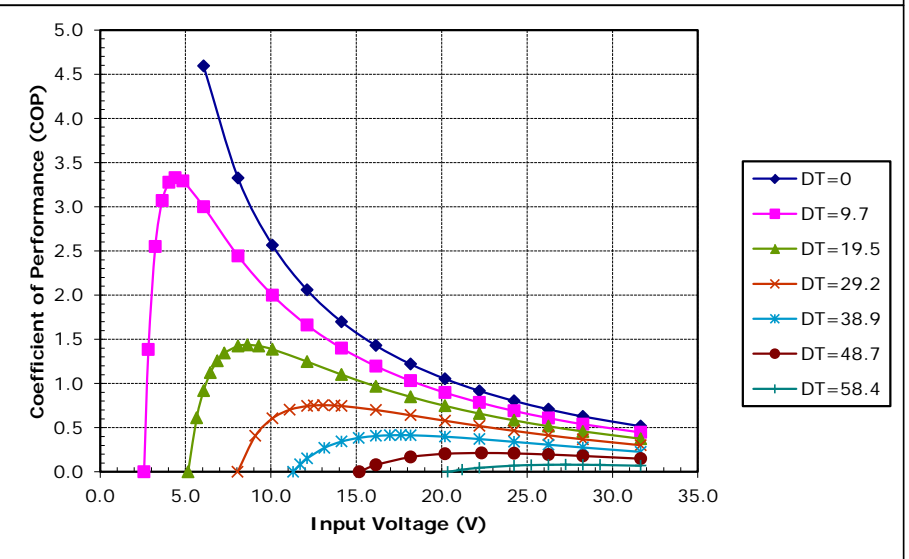
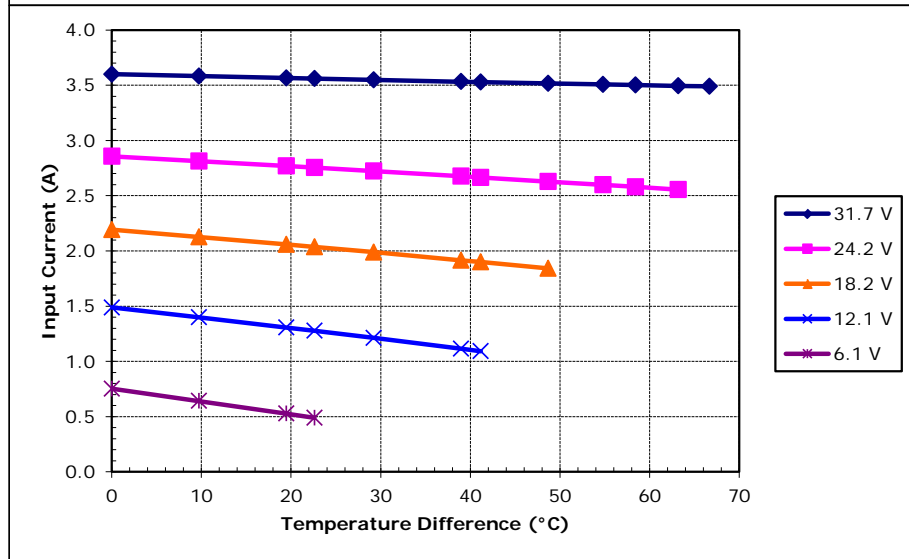
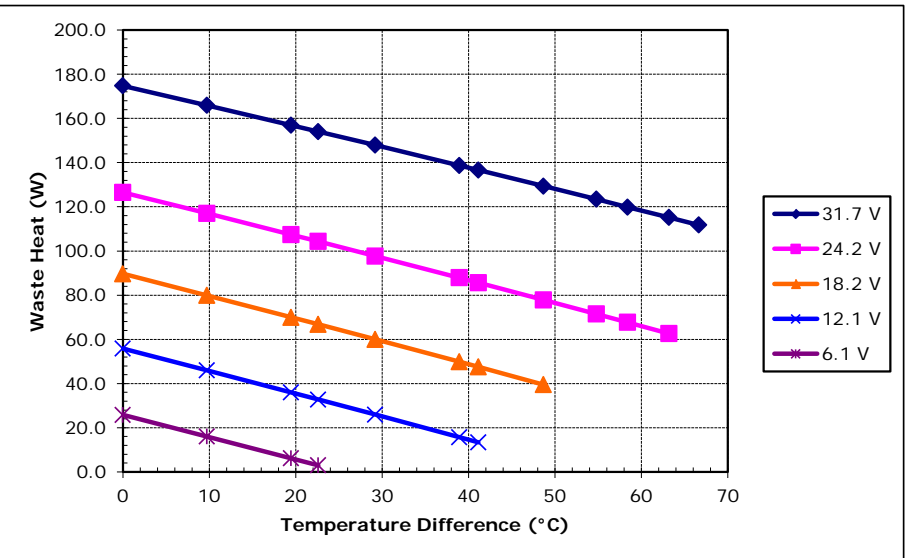
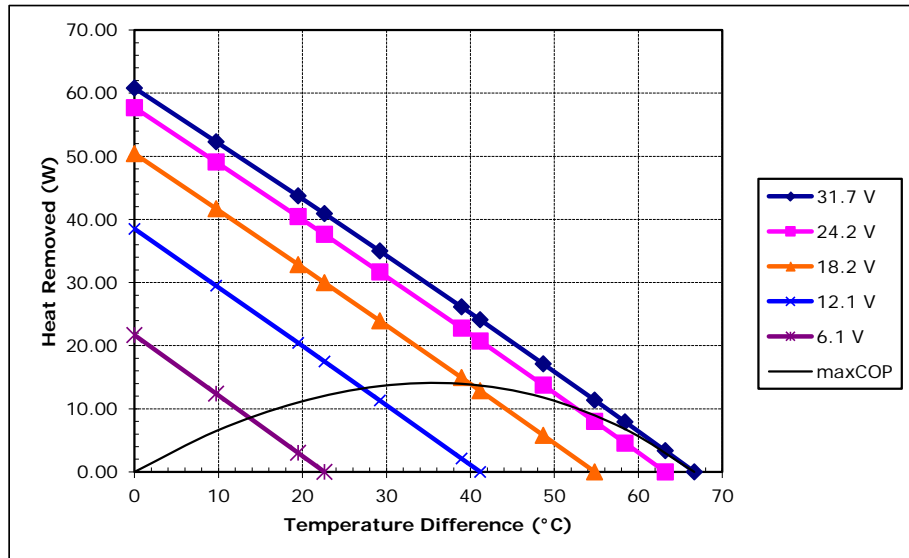
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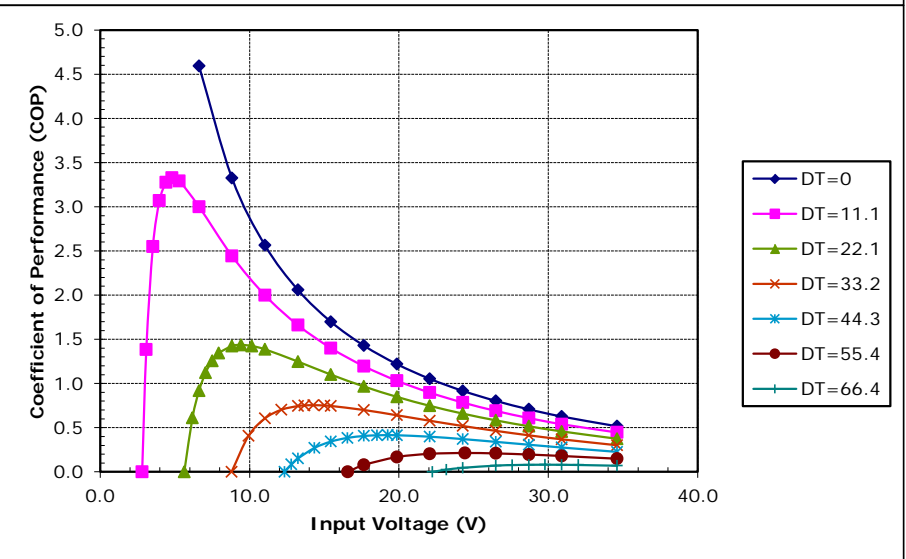
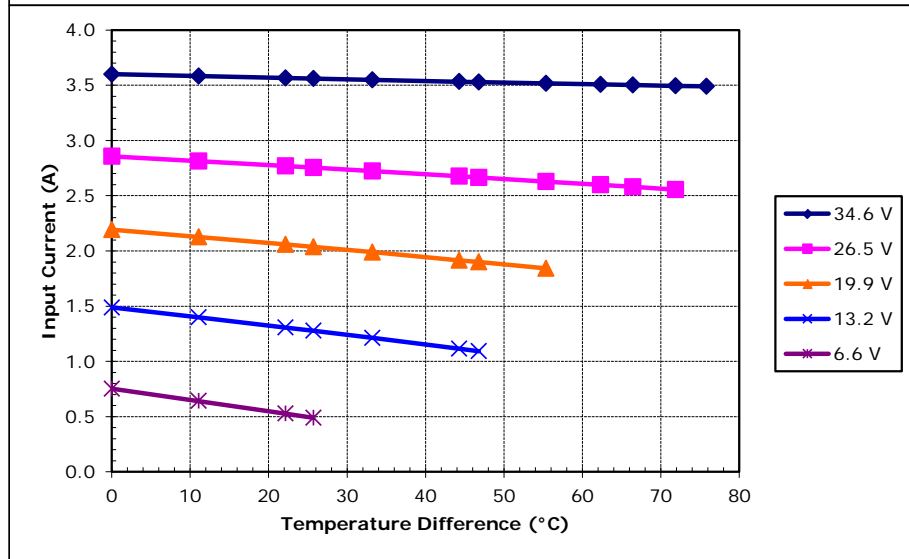
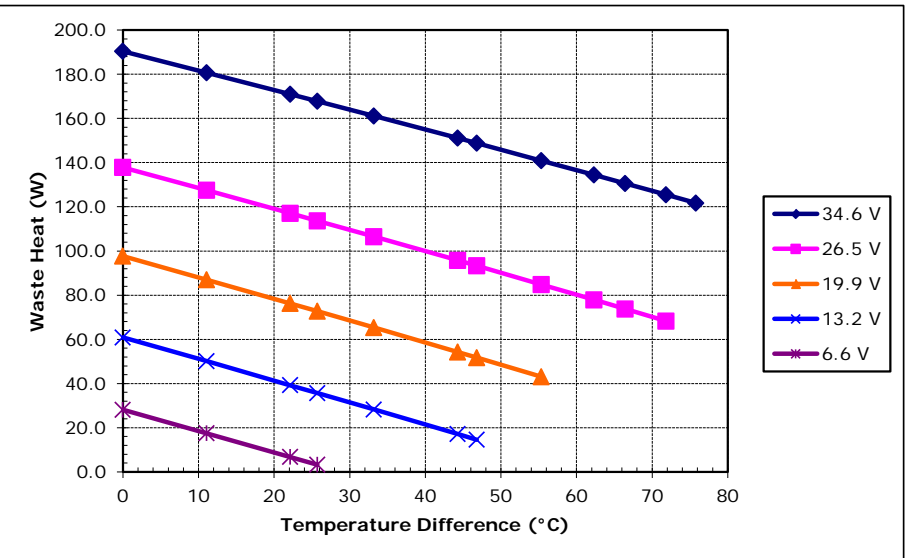
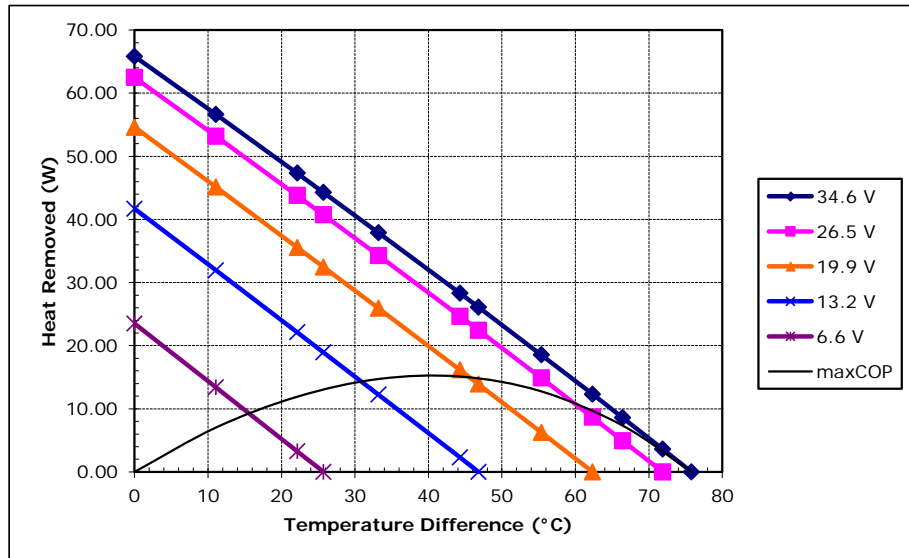
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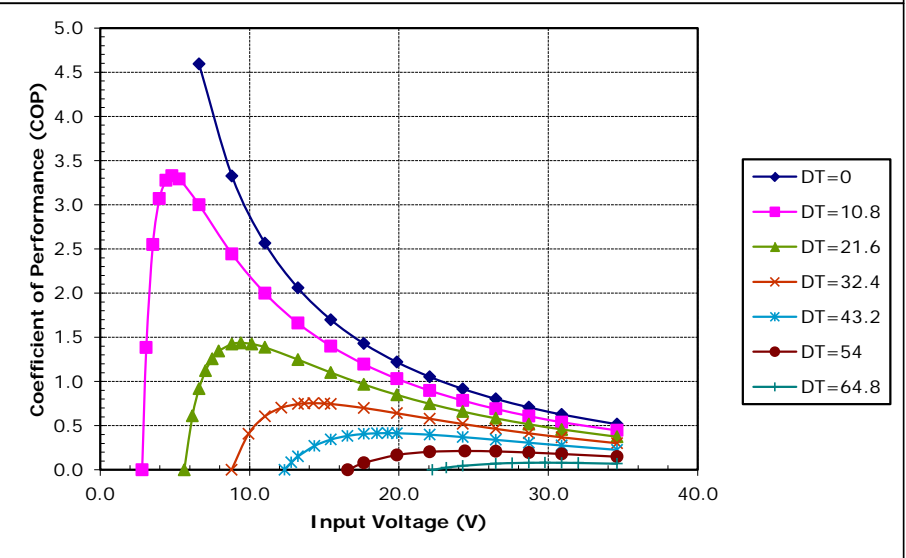
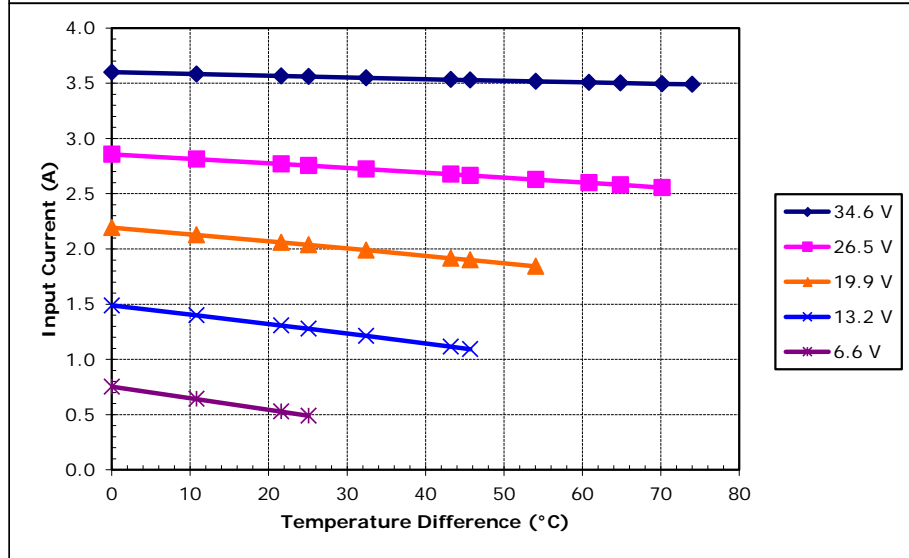
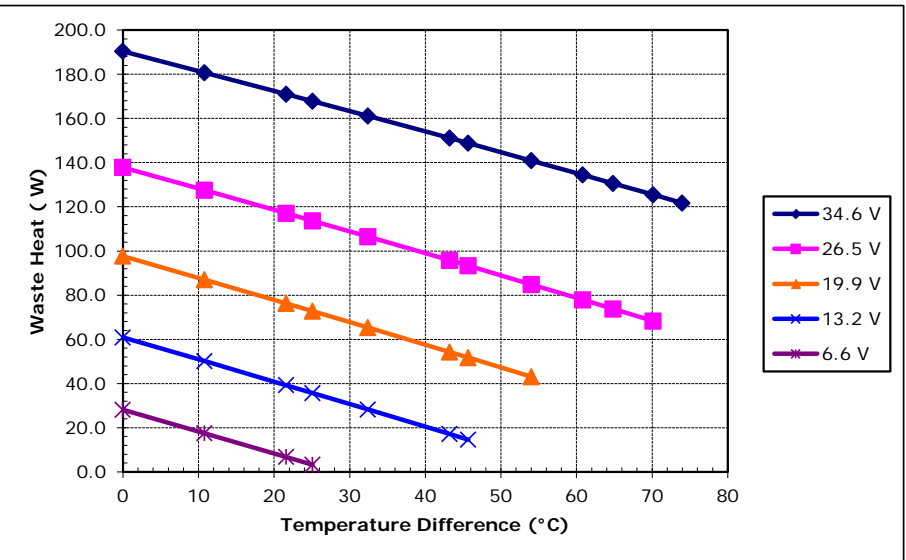
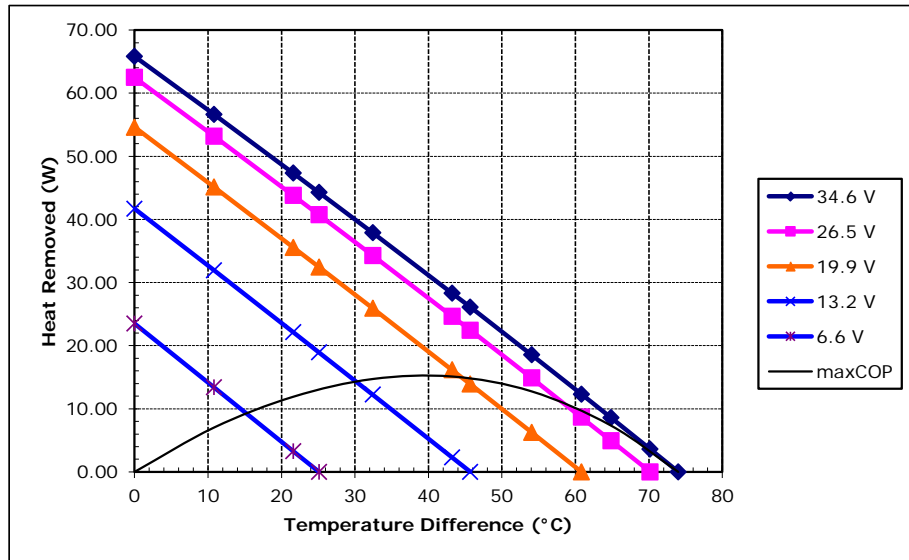
Unpotted SP-254-1.0-1.3 (Series) at a hot-side temperature of 30 °C



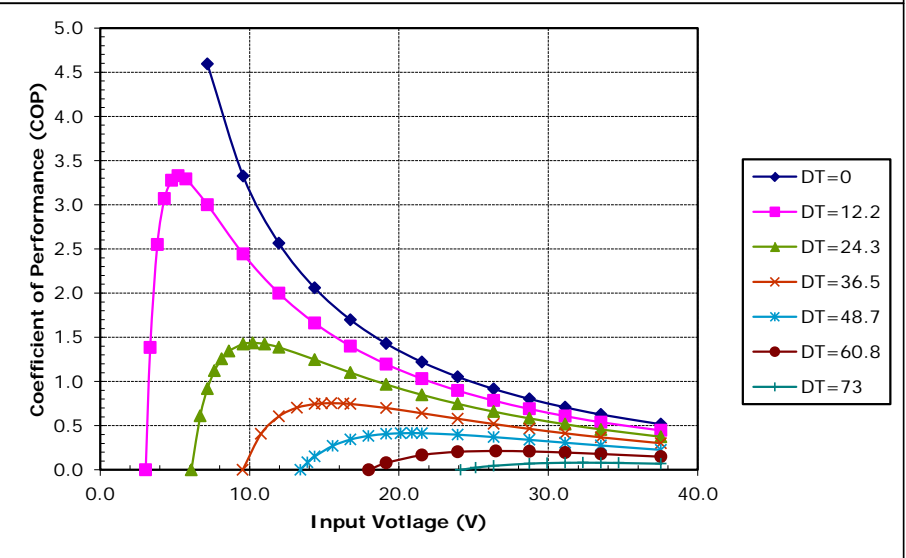
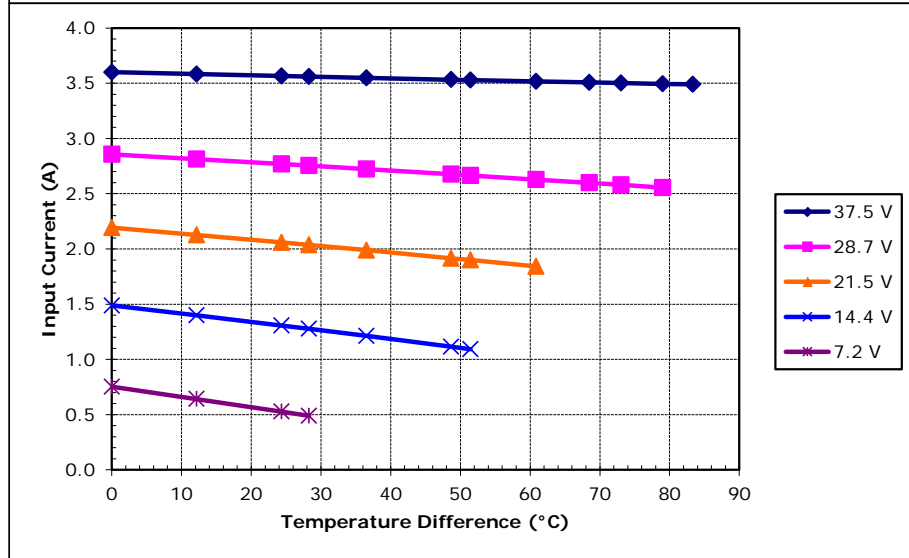
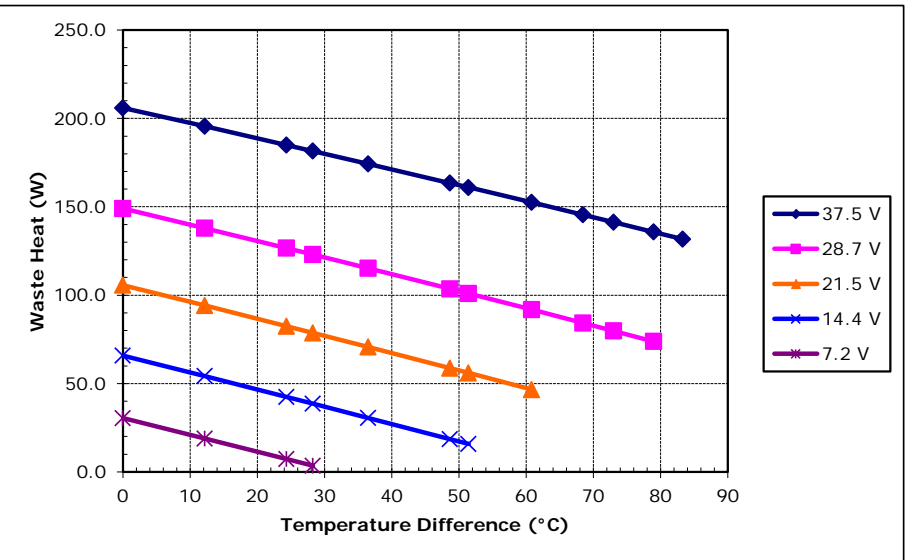
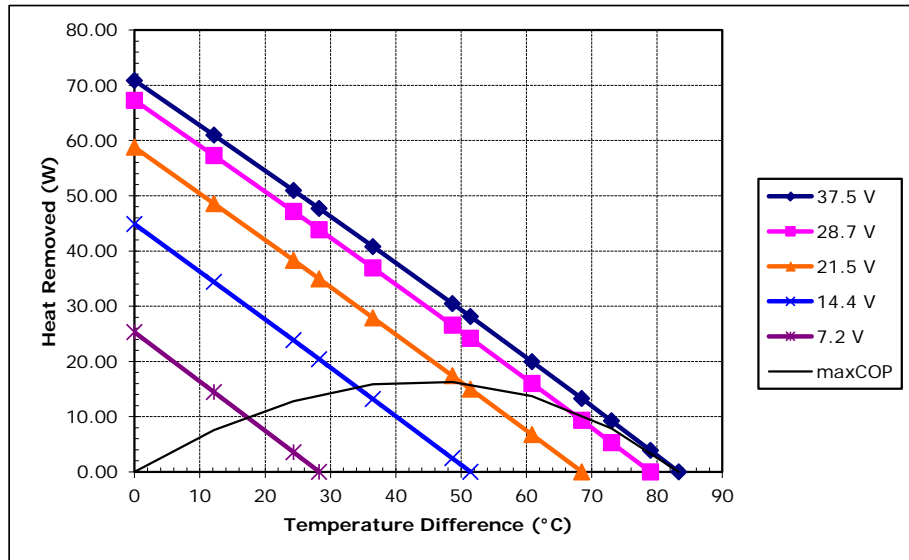
Potted SP-254-1.0-1.3 (Series) at a hot-side temperature of 30 °C



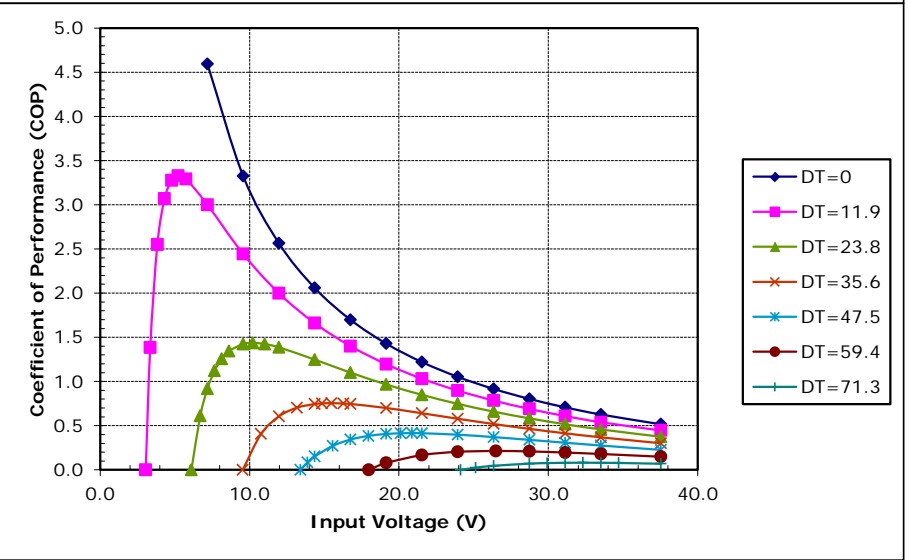
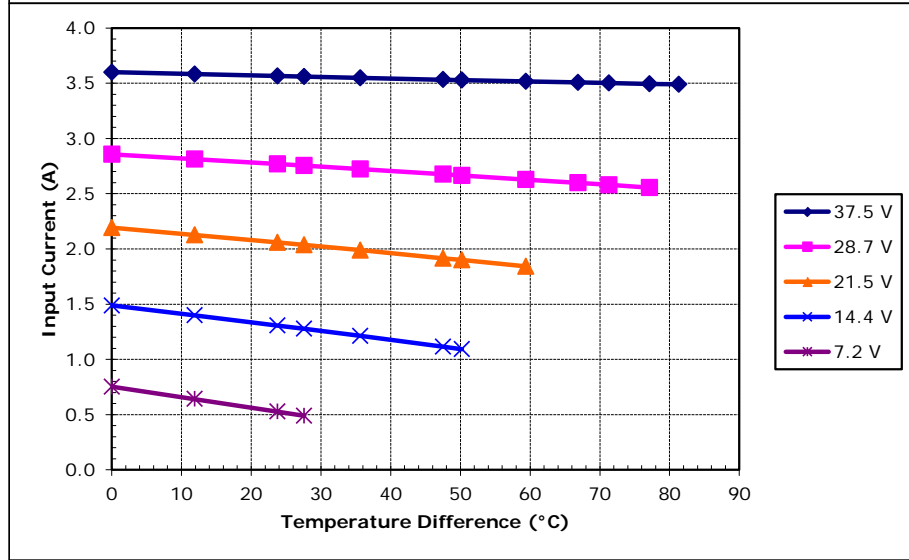
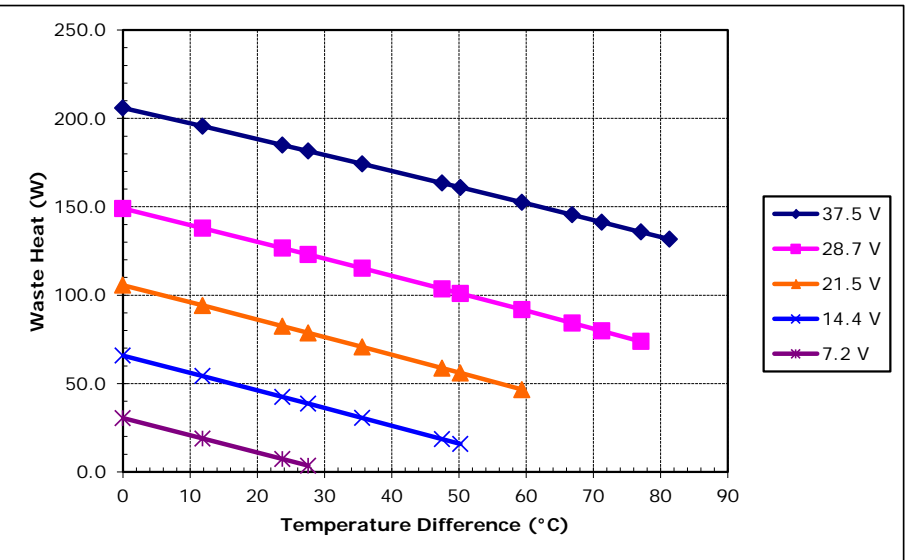
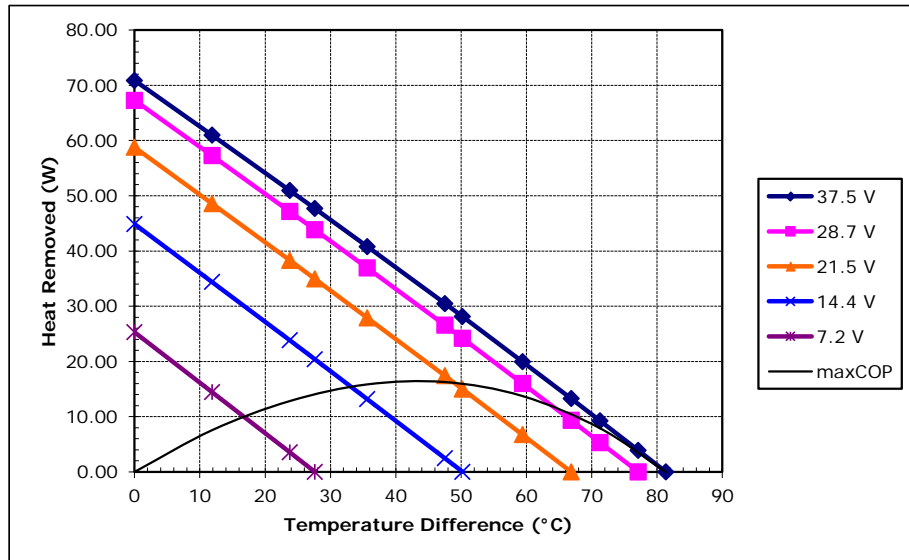
Unpotted SP-254-1.0-1.3 (Series) at a hot-side temperature of 50 °C



Potted SP-254-1.0-1.3 (Series) at a hot-side temperature of 50 °C

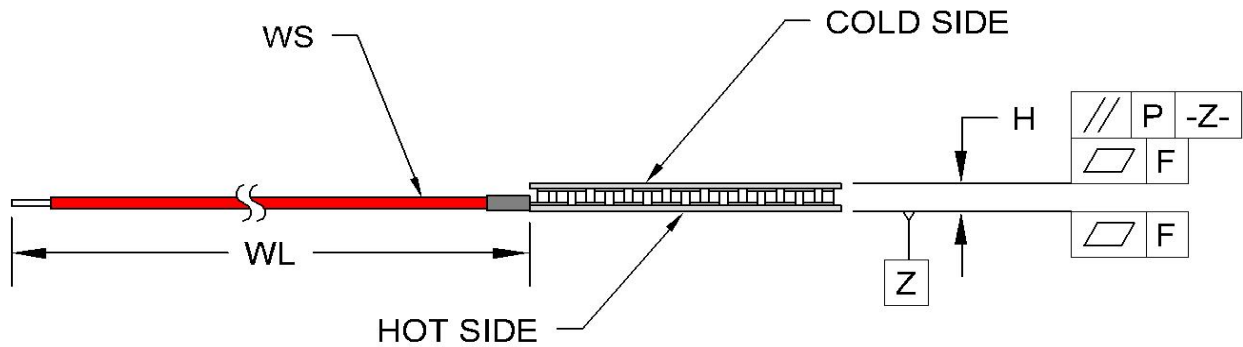
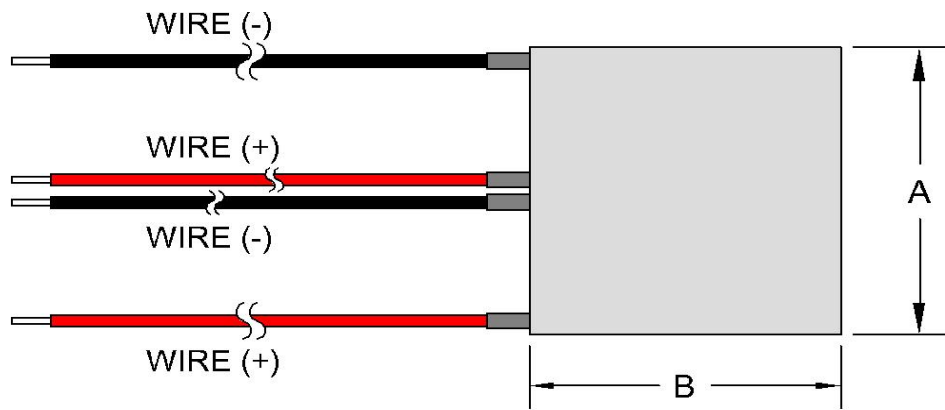


Unpotted SP-254-1.0-1.3 (Series) at a hot-side temperature of 70 °C



Potted SP-254-1.0-1.3 (Series) at a hot-side temperature of 70 °C

| | | | | |
|--|----------------------|---|---|--|
| SP-254-1.0-1.3 (Parallel) Thermoelectric Module (Peltier Module) Specifications | | Material Specifications (27 °C hot side temperature) | Material Specifications (50 °C hot side temperature) | Module <i>material</i> 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, <i>Thermoelectric Module Mounting Procedure</i> , parameter definitions, FAQ's, and ordering information posted on our website before purchasing or using this product. |
| | Vmax (V) | 15.7 | 17.4 | |
| | I _{max} (A) | 7.2 | 7.2 | |
| | Q _{max} (W) | 70.0 | 76.8 | |
| DT _{max} (°C) | 69 | 78 | | |
| Operation/storage temperature | -40 °C to +80 °C | | | |



| | |
|----------------------------------|--------------|
| Width, A (mm) | 40 +0.5/-0.2 |
| Width, B (mm) | 40 +0.5/-0.2 |
| Height, H (mm) | 3.6 ±0.05 |
| Flatness, F (mm) | 0.02 |
| Parallelism, P (mm) | 0.03 |
| Wire Size, WS (mm ²) | 0.34 |
| Wire Length, WL (mm) | 120 |

Optional Features and Notes:

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

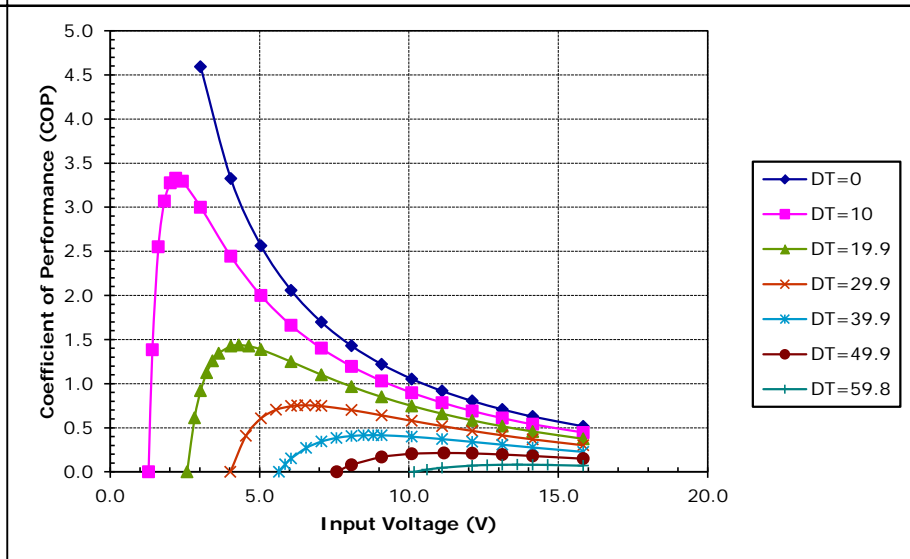
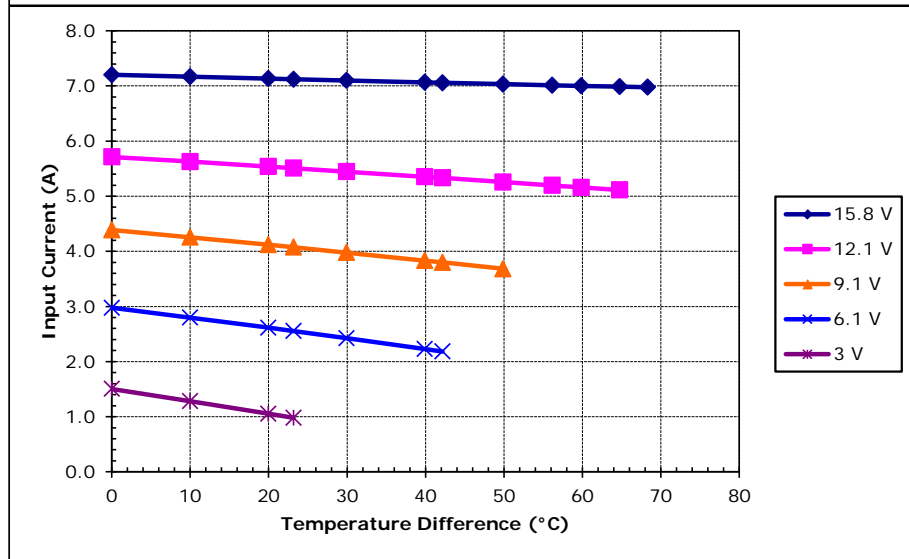
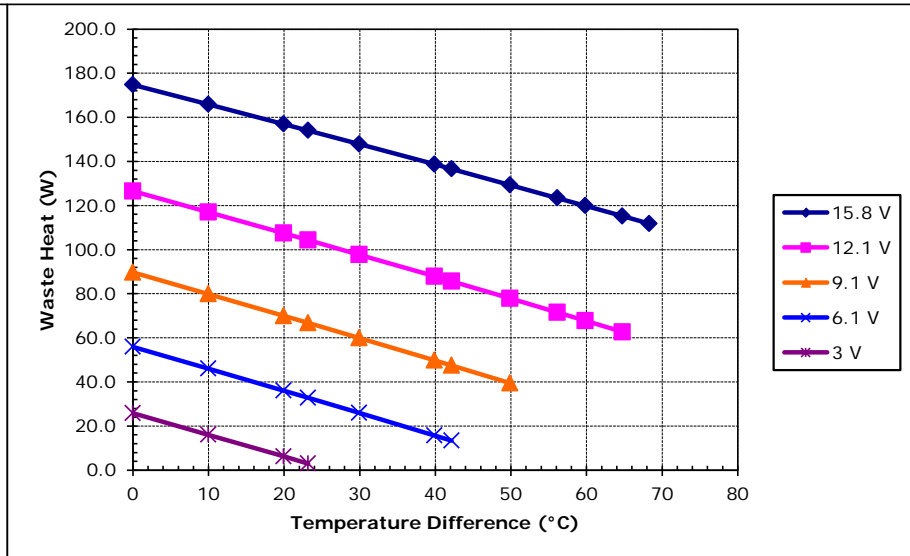
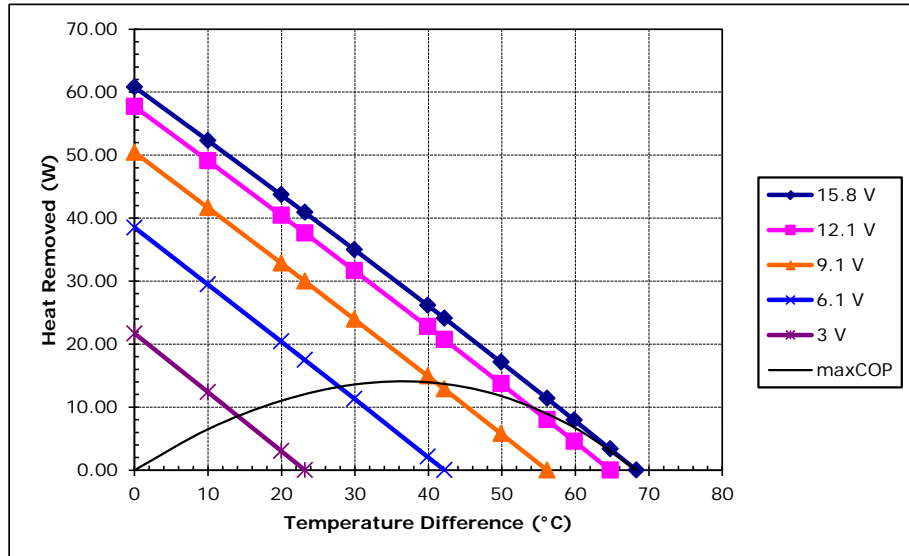
Module can be configured in series mode as well.

Performance graphs include thermal resistance of substrates.

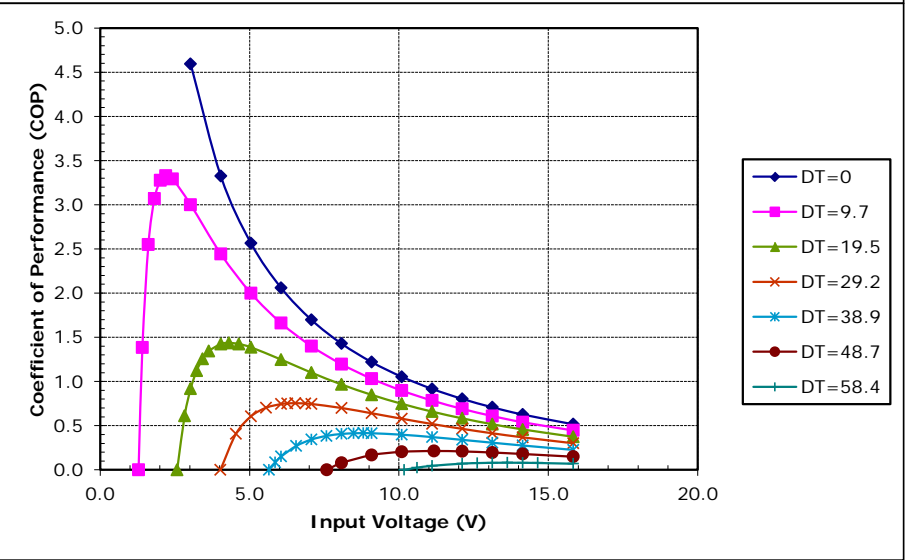
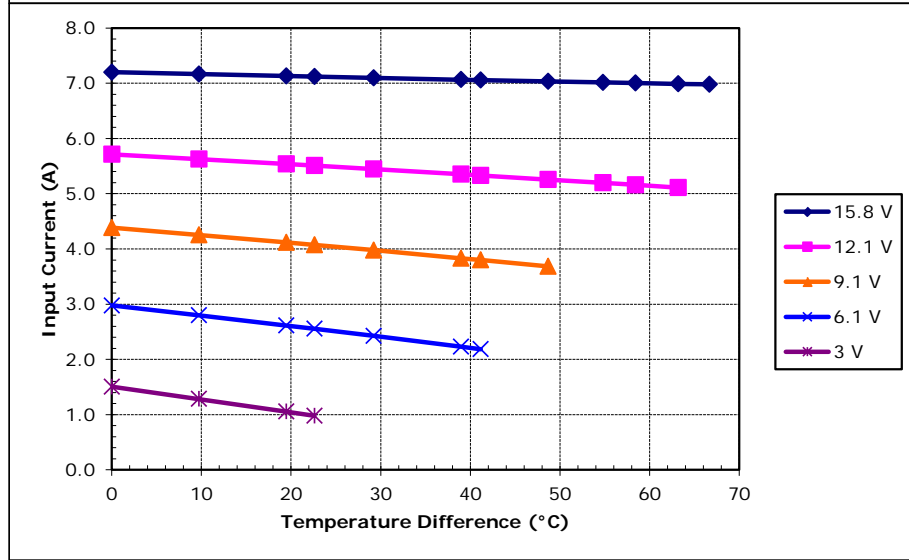
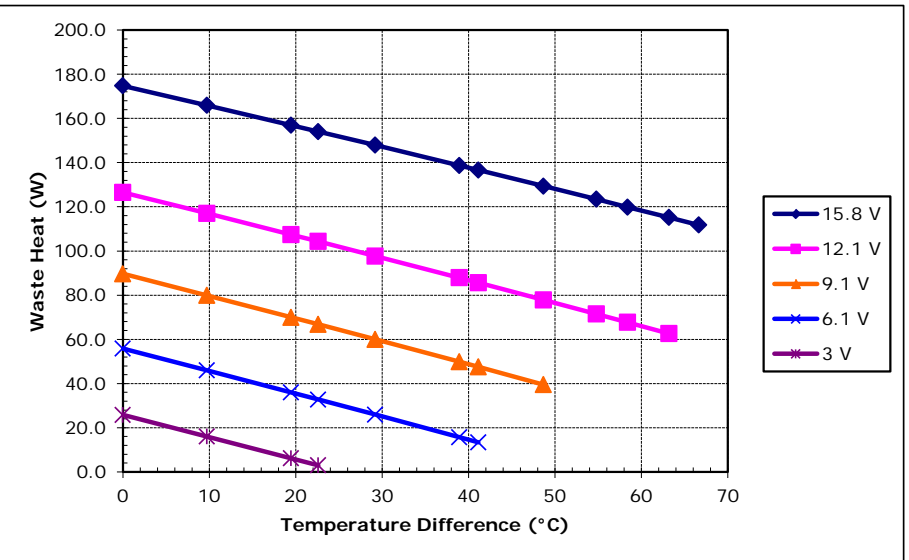
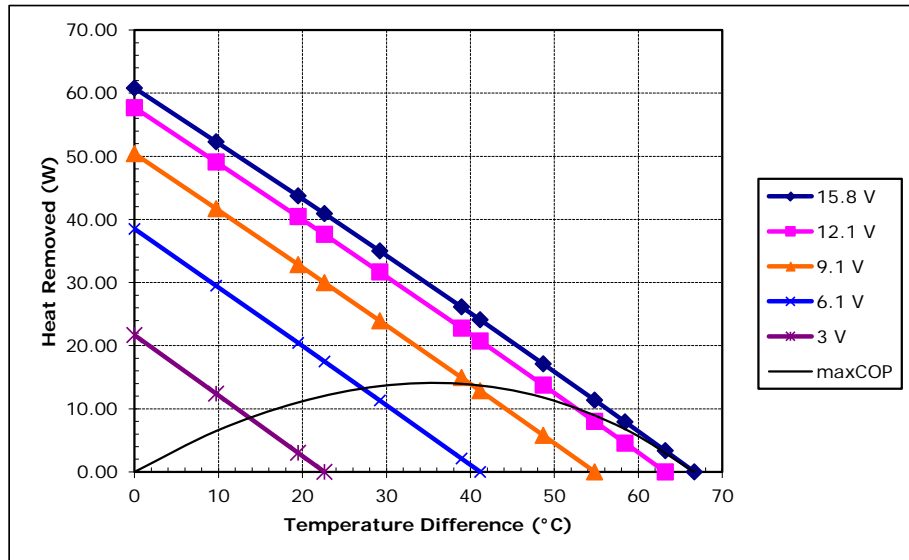
RoHS Compliant



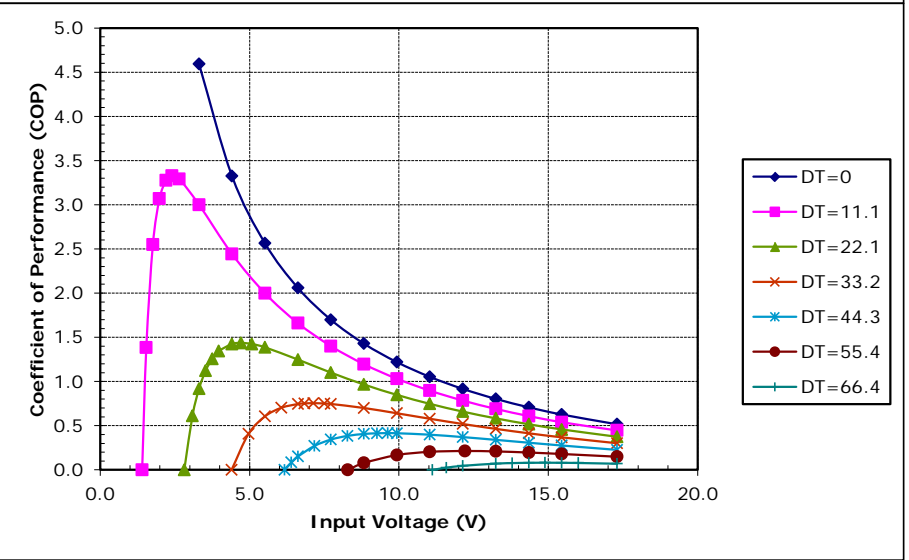
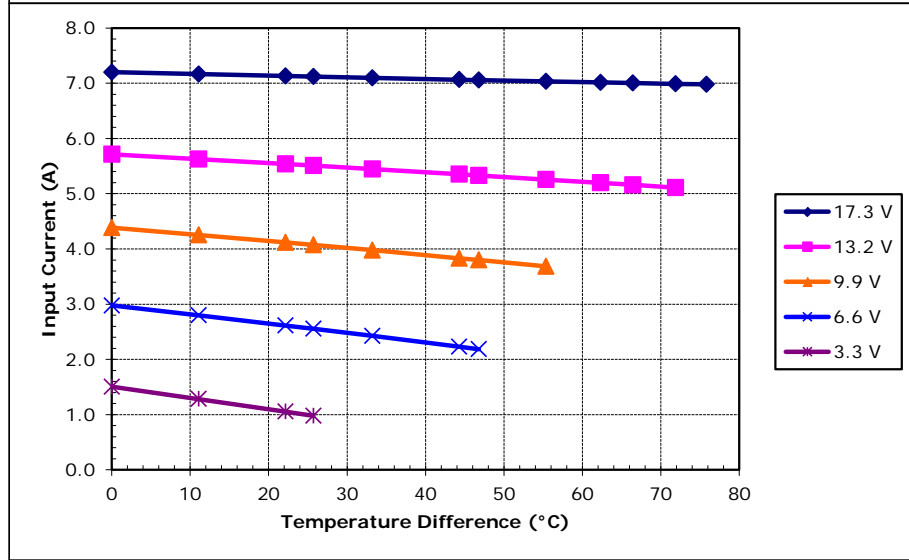
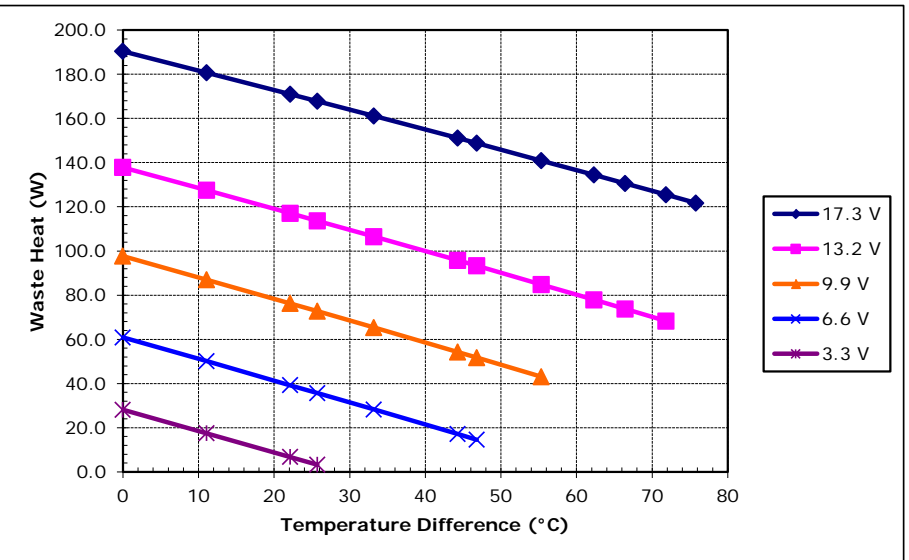
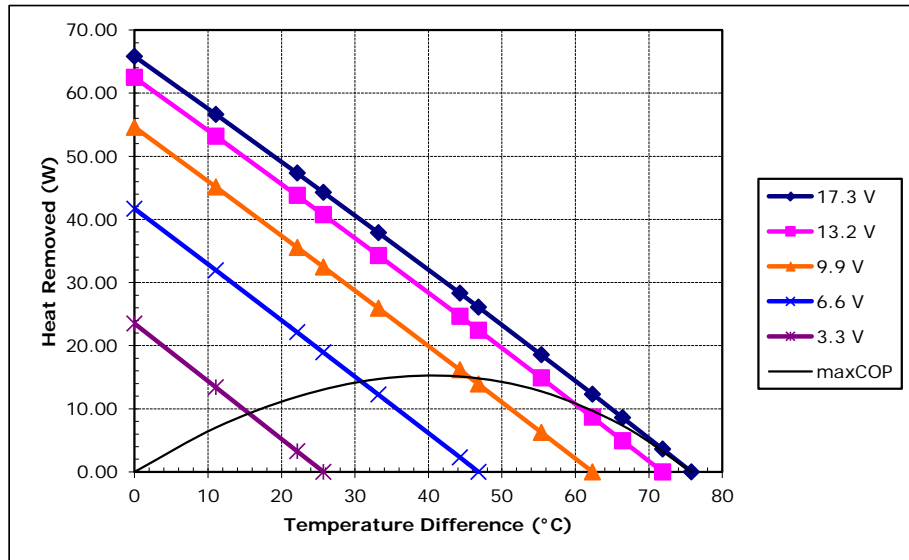
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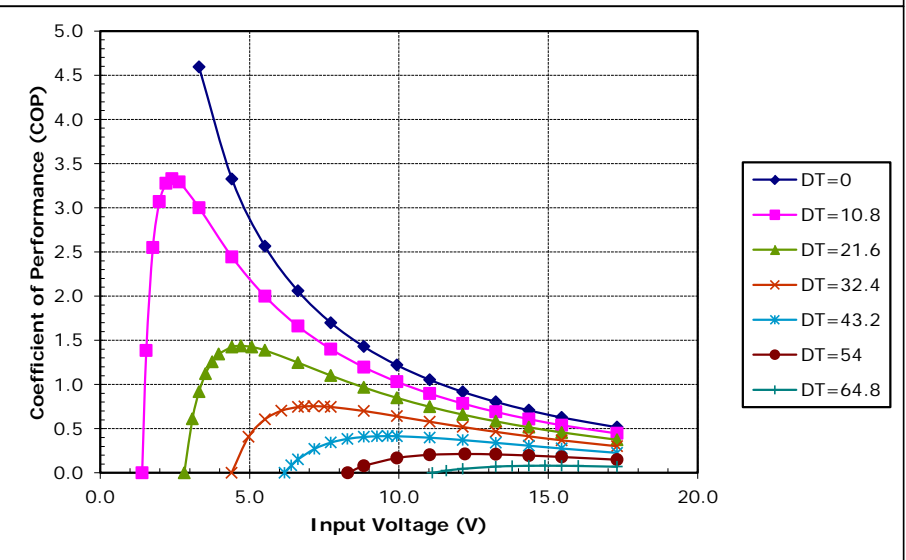
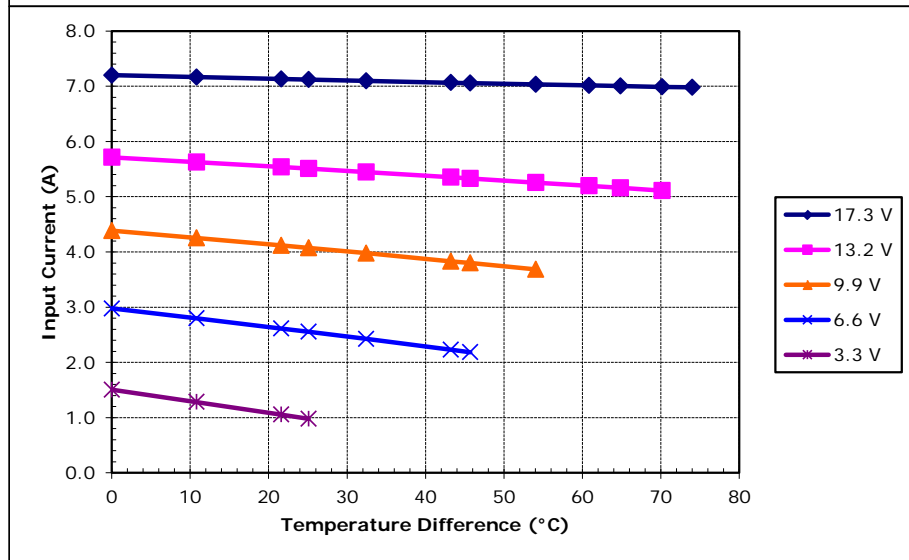
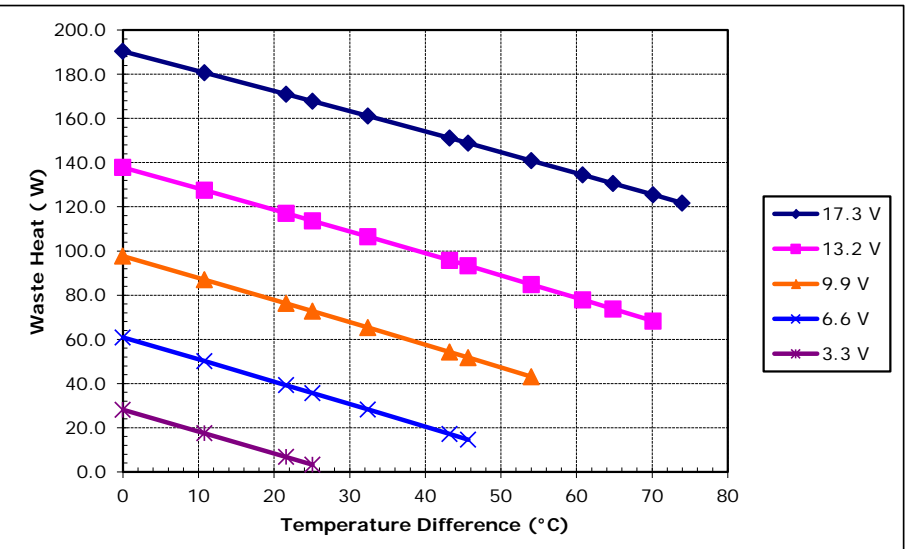
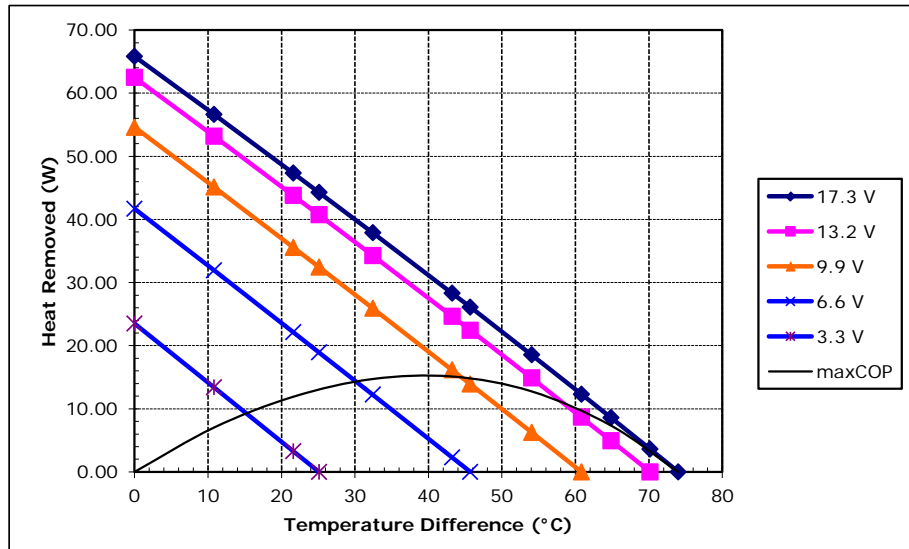
Unpotted SP-254-1.0-1.3 (Parallel) at a hot-side temperature of 30 °C



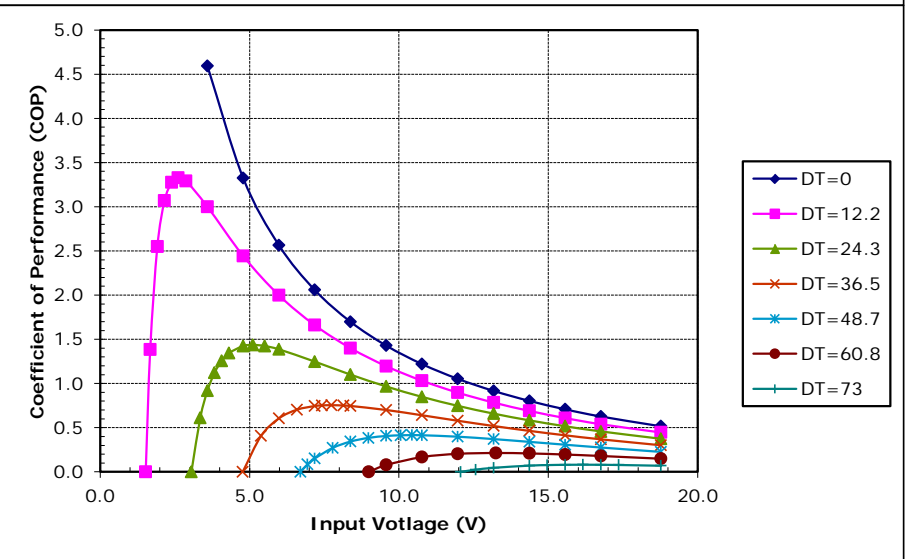
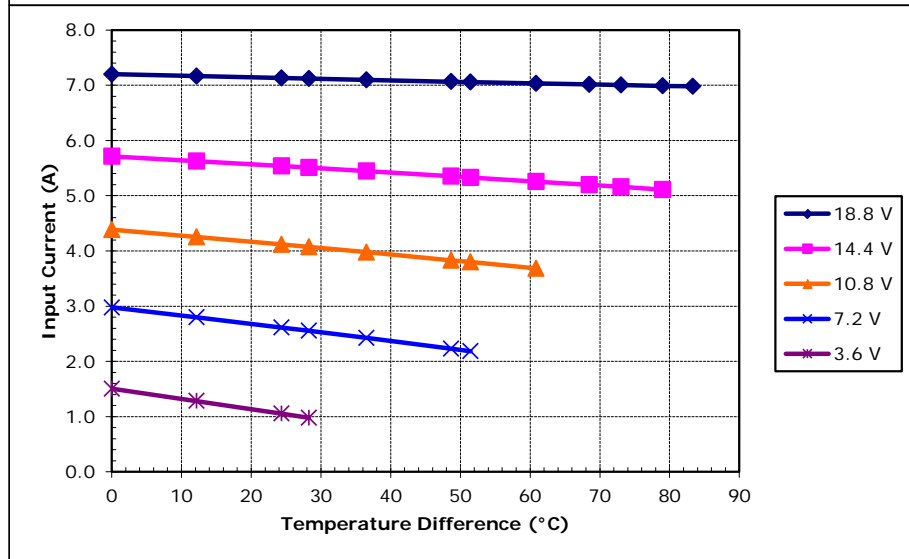
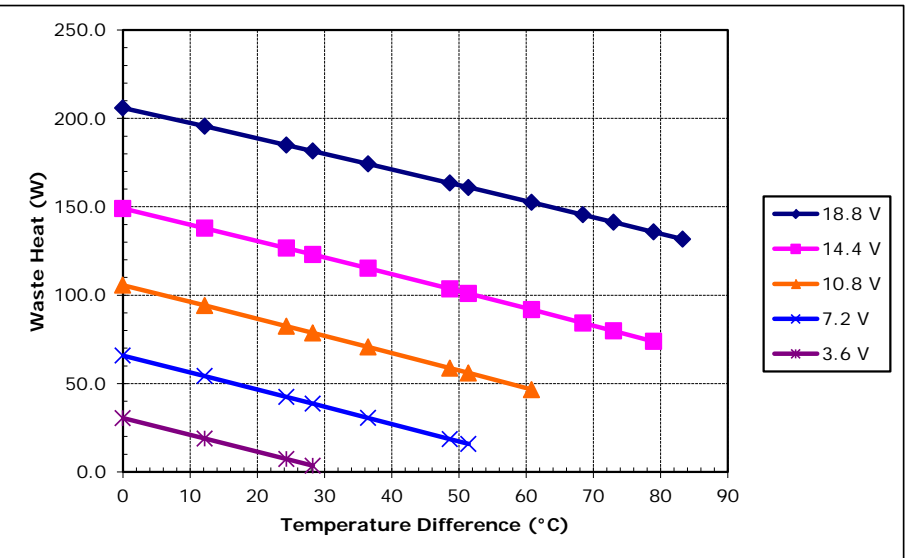
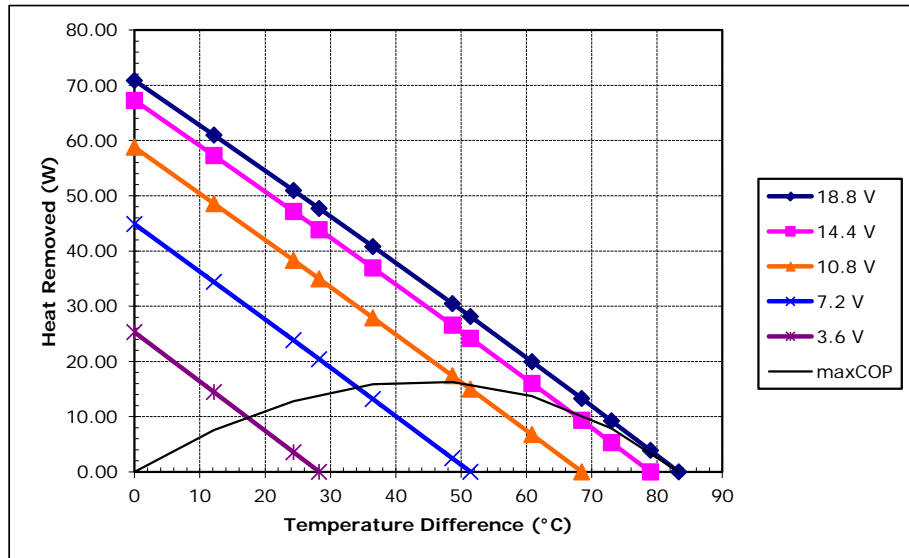
Potted SP-254-1.0-1.3 (Parallel) at a hot-side temperature of 30 °C



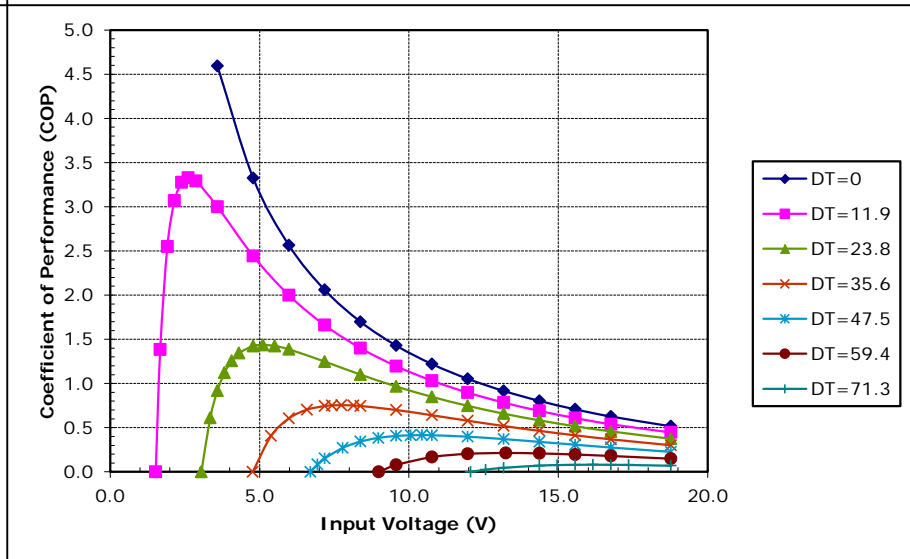
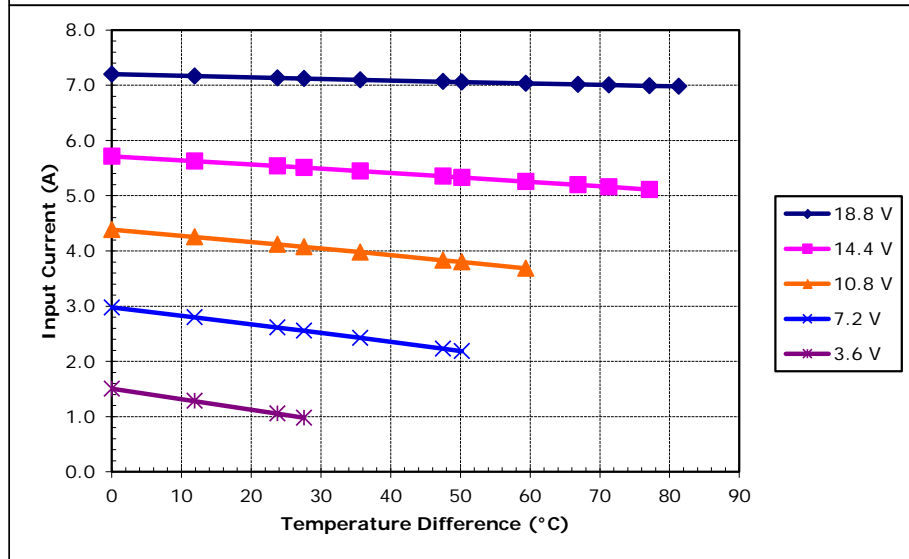
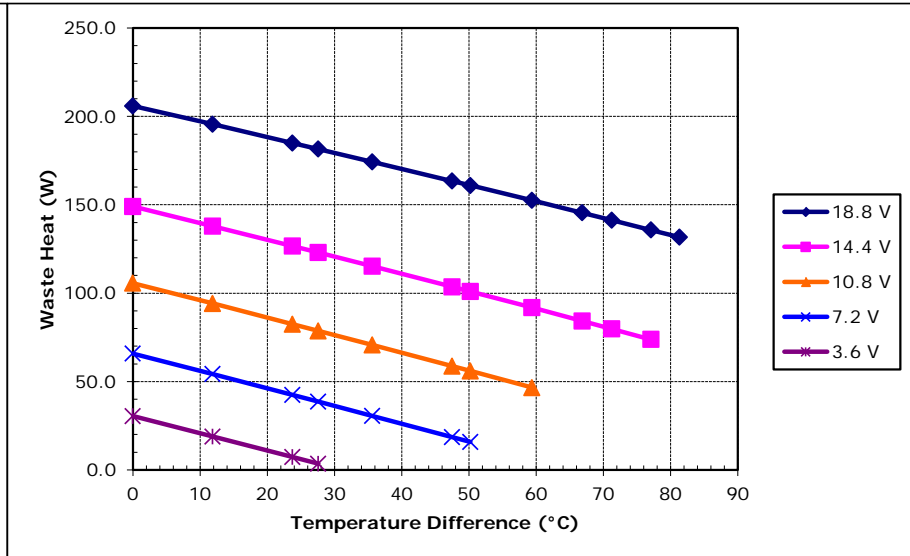
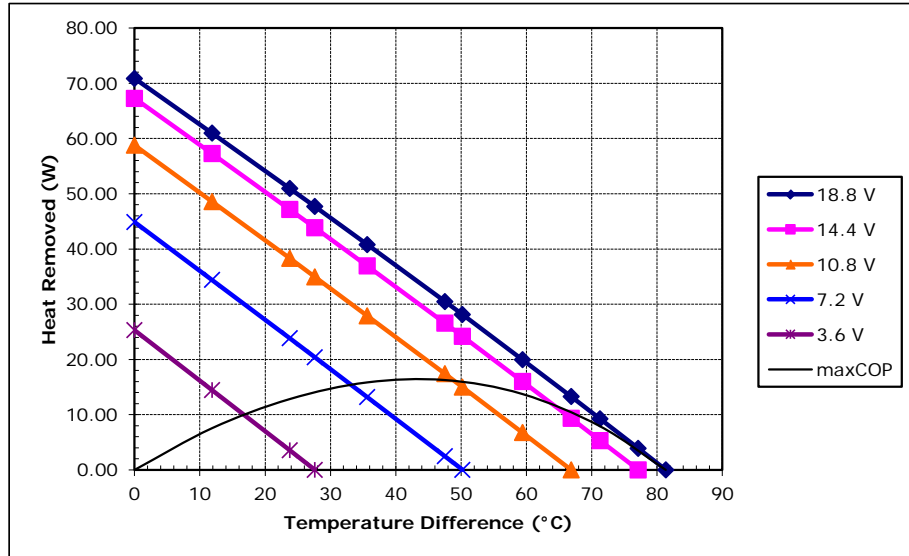
Unpotted SP-254-1.0-1.3 (Parallel) at a hot-side temperature of 50 °C



Potted SP-254-1.0-1.3 (Parallel) at a hot-side temperature of 50 °C



Unpotted SP-254-1.0-1.3 (Parallel) at a hot-side temperature of 70 °C



Potted SP-254-1.0-1.3 (Parallel) at a hot-side temperature of 70 °C