

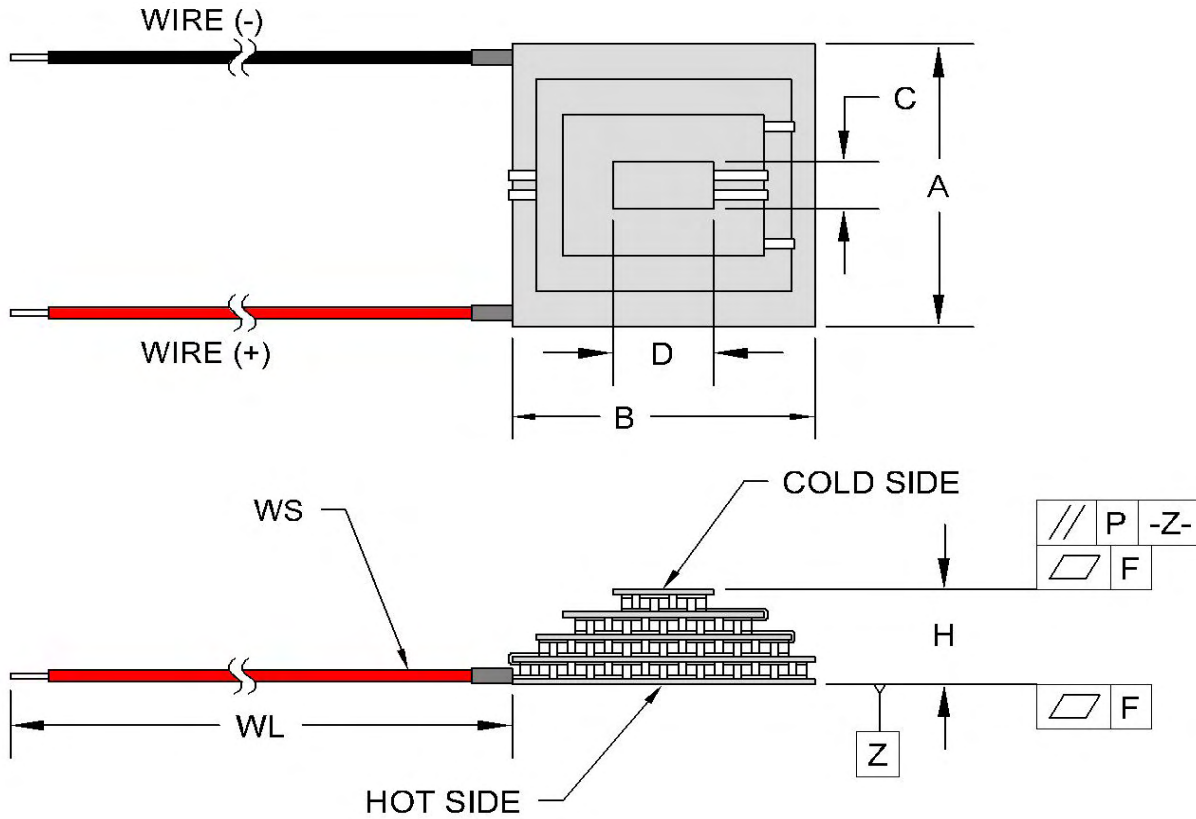
**TE-4-(59-31-11-4)-1.0
Thermoelectric Module
(Peltier Module)
Specifications**

| | Material Specifications (27 °C hot side temperature) | Material Specifications (50 °C hot side temperature) |
|-------------------------------|---------------------------------------------------------|---------------------------------------------------------|
| Vmax (V) | 6.9 | 7.7 |
| I _{max} (A) | 1.1 | 1.1 |
| Q _{max} (W) | 0.6 | 0.7 |
| DT _{max} (°C) | 116 | 131 |
| 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*, FAQ's and ordering information posted on our website before purchasing or using this product.



| | |
|----------------------------------|--------------|
| Width, A (mm) | 12 +0.5/-0.2 |
| Width, B (mm) | 12 +0.5/-0.2 |
| Width, C (mm) | 2 +0.5/-0.2 |
| Width, D (mm) | 4 +0.5/-0.2 |
| Height, H (mm) | 9.85 ±0.35 |
| Flatness, F (mm) | 0.1 |
| Parallelism, P (mm) | 0.15 |
| Wire Size, WS (mm ²) | 0.2 |
| Wire Length, WL (mm) | 50 |

Optional Features and Notes:

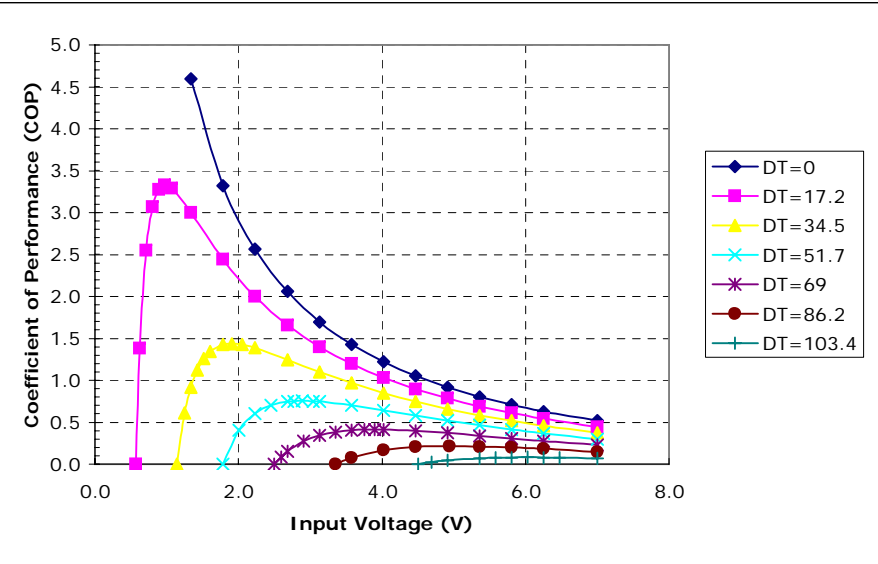
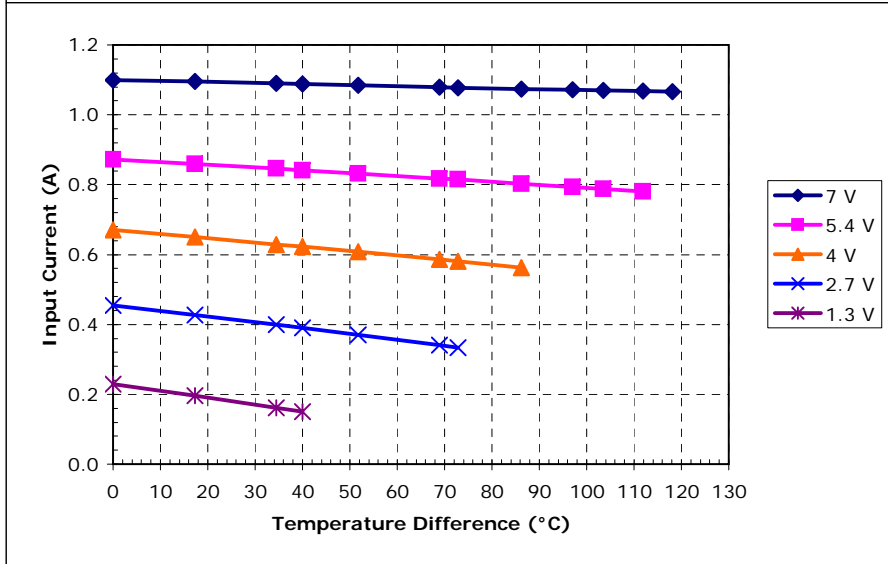
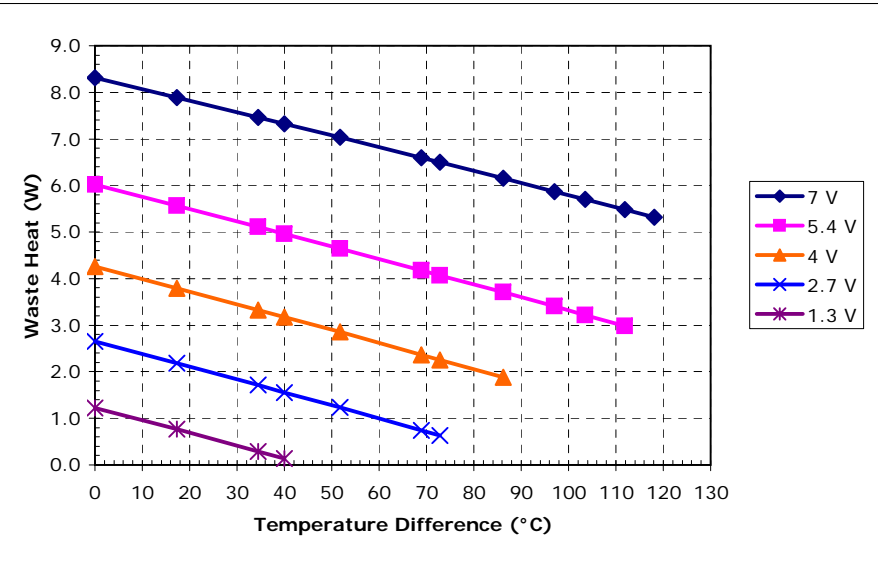
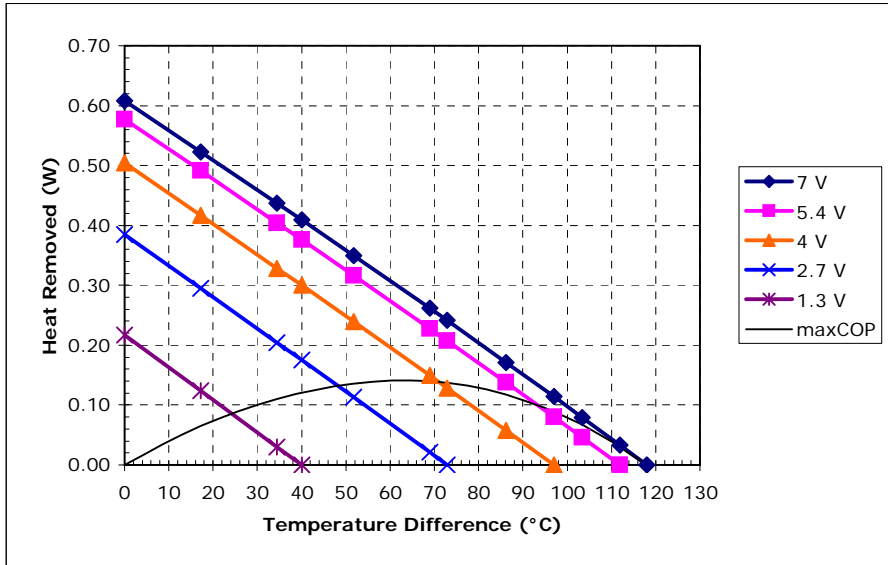
Add "P" to part number for sealing module with epoxy potting.

Performance graphs include thermal resistance of substrates.

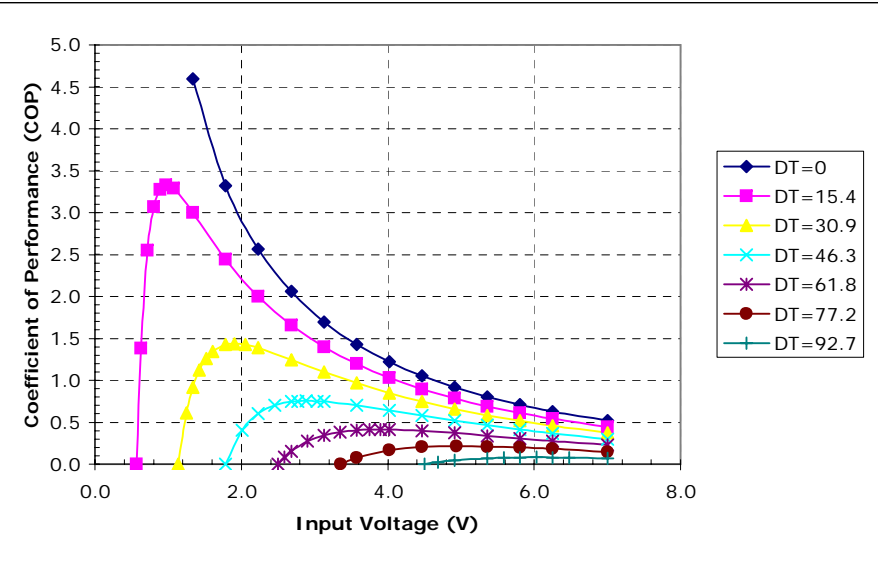
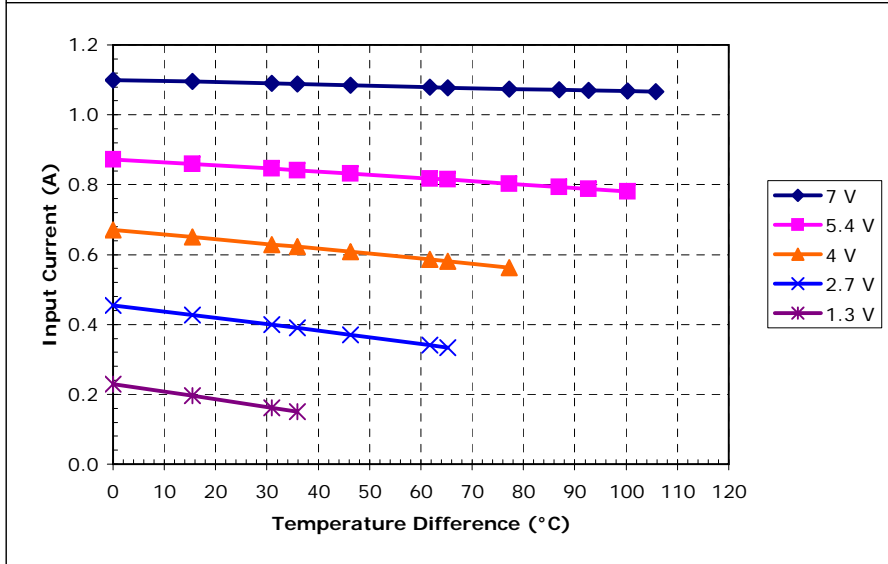
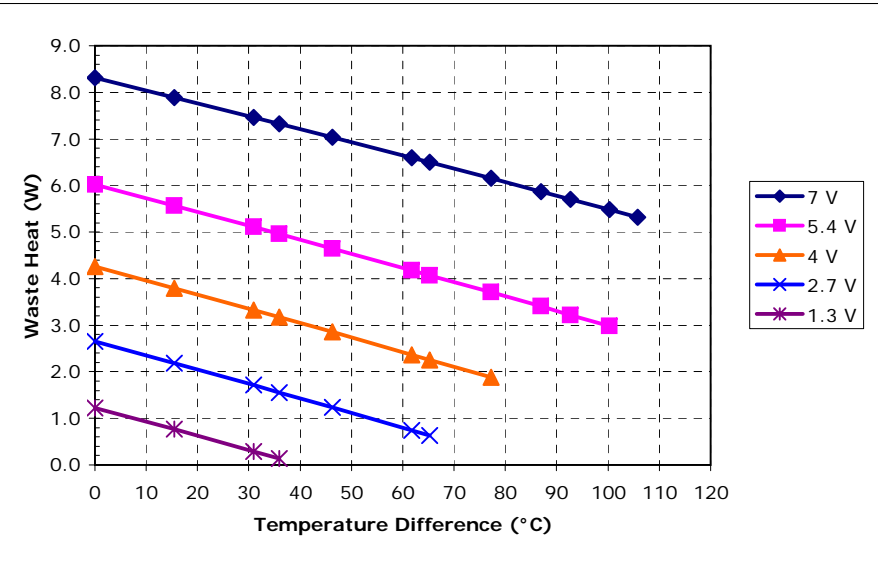
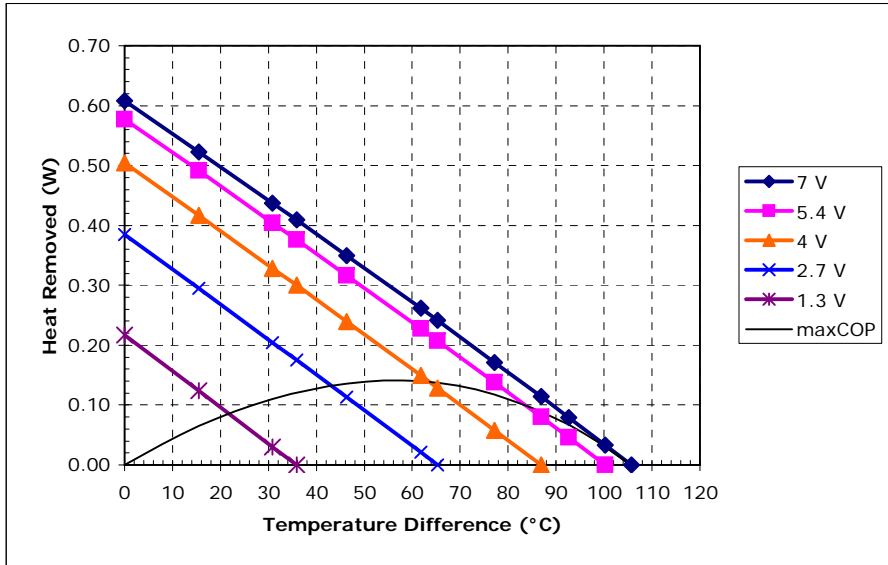
RoHS Compliant
Directive 202/95/EC



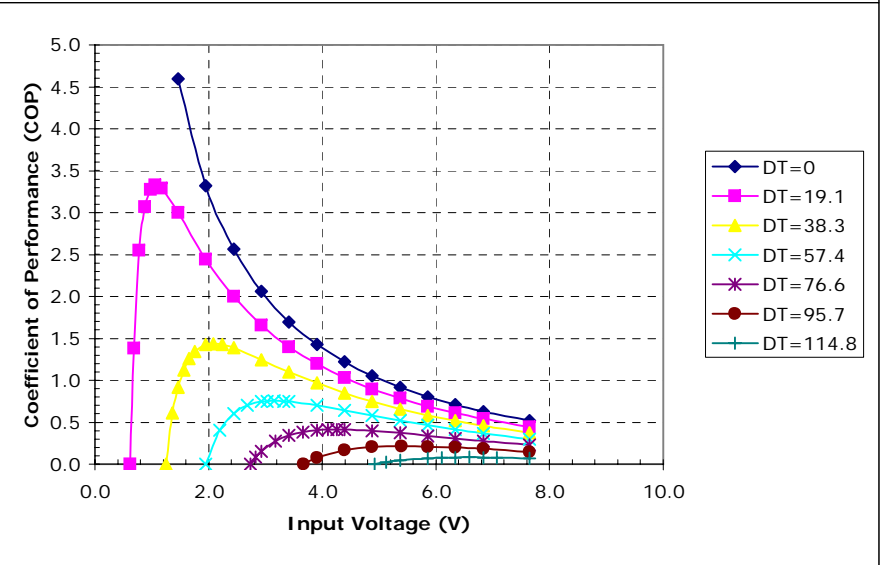
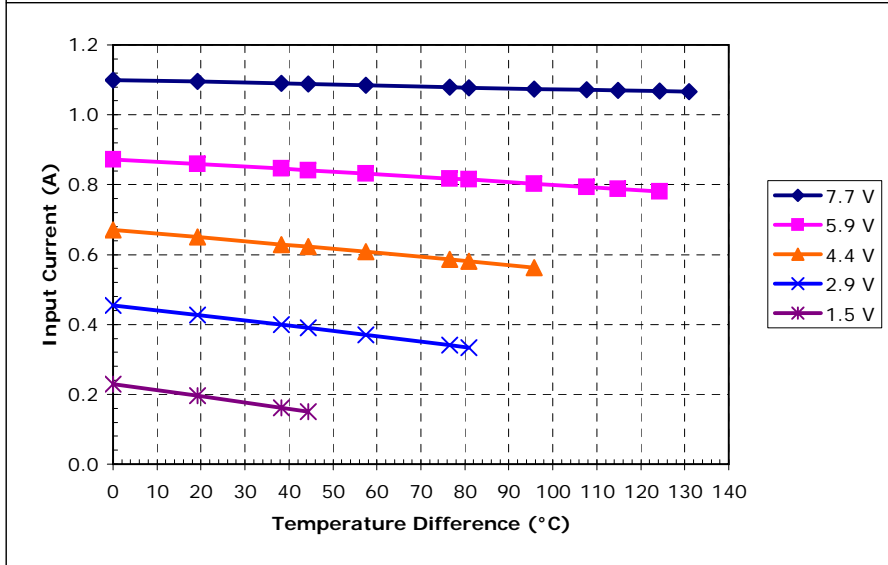
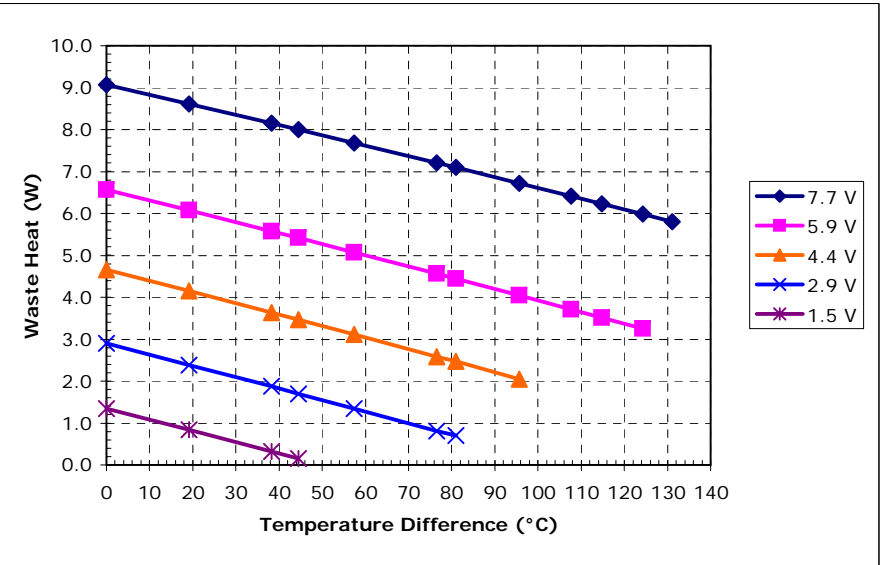
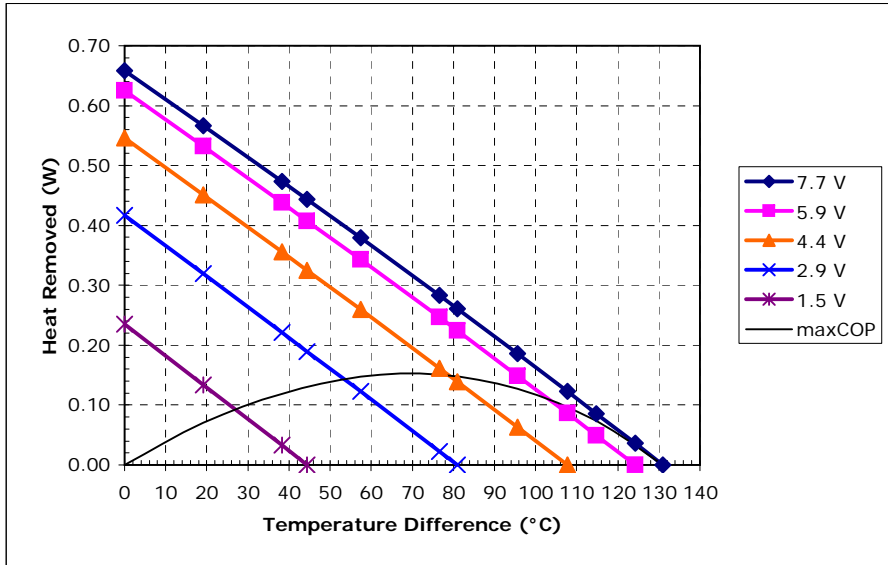
1590 Keane Drive, Traverse City, MI, 49686-8257 USA
PH: 231-929-3966 FAX: 231-929-4163 email: cool@totech.com



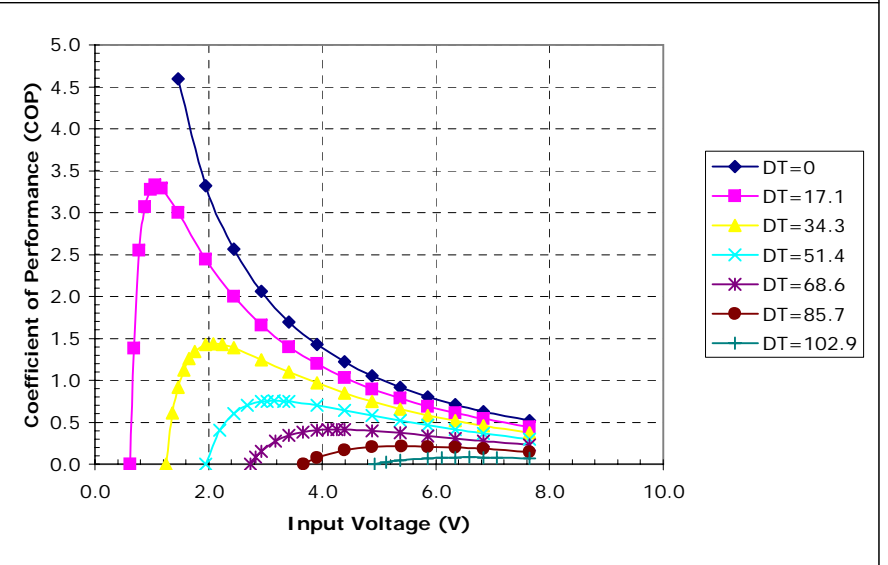
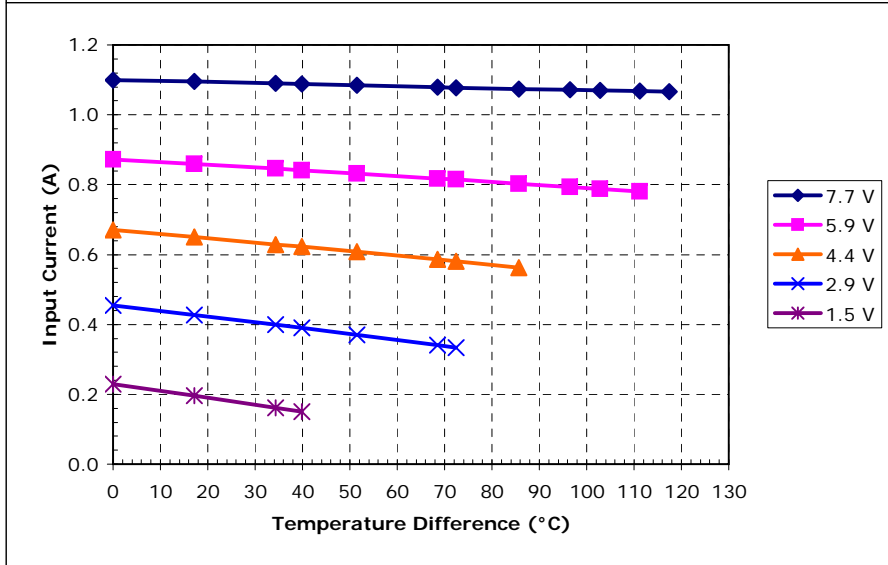
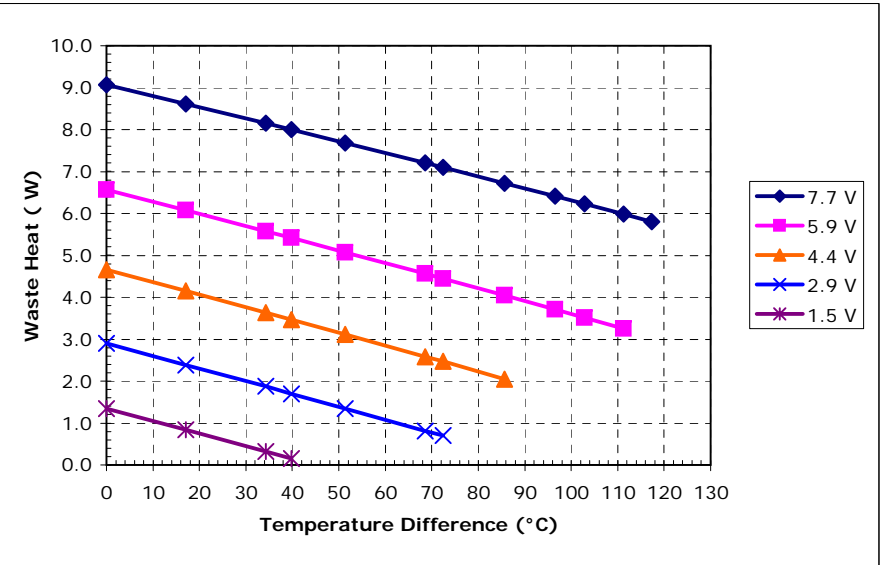
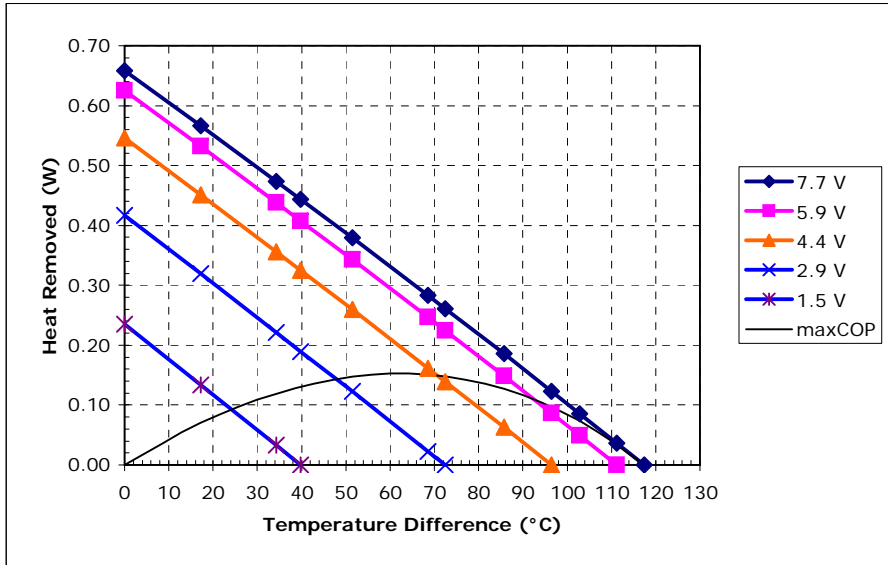
Unpotted TE-4-(59-31-11-4)-1.0 at a hot-side temperature of 30 °C



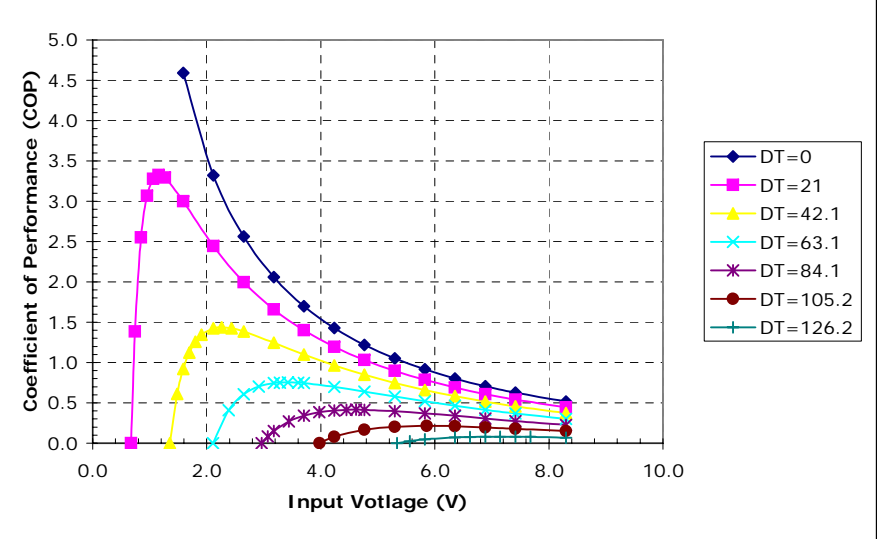
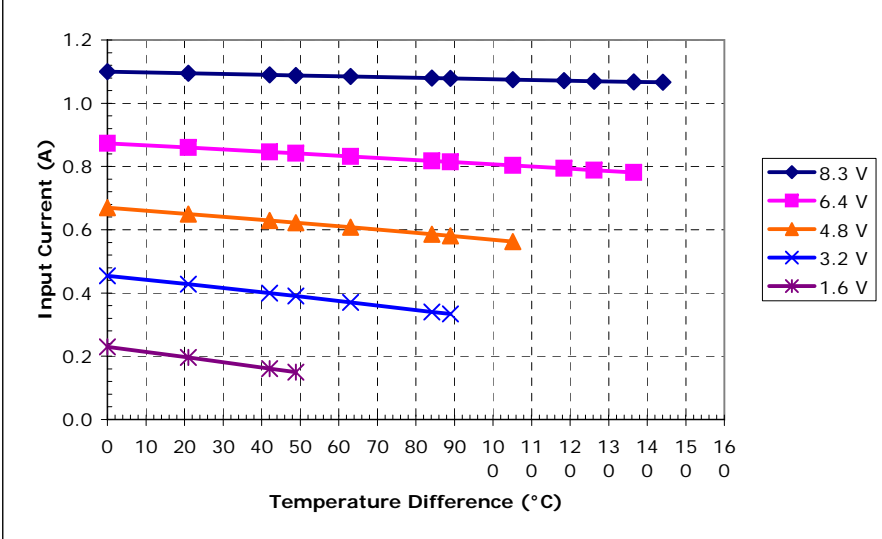
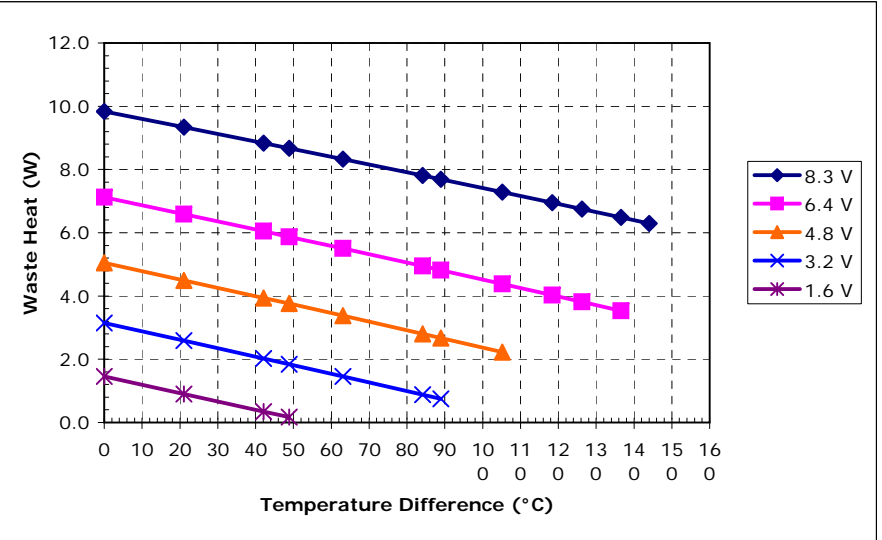
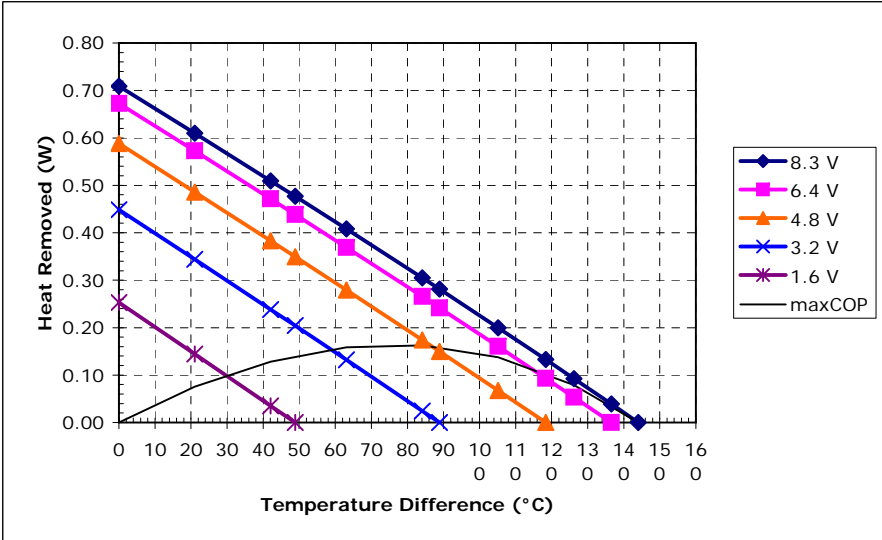
Potted TE-4-(59-31-11-4)-1.0 at a hot-side temperature of 30 °C



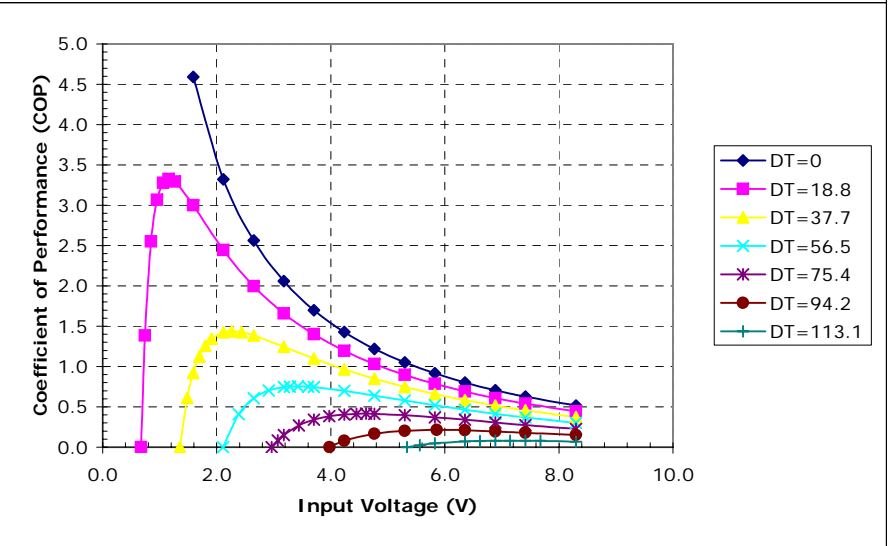
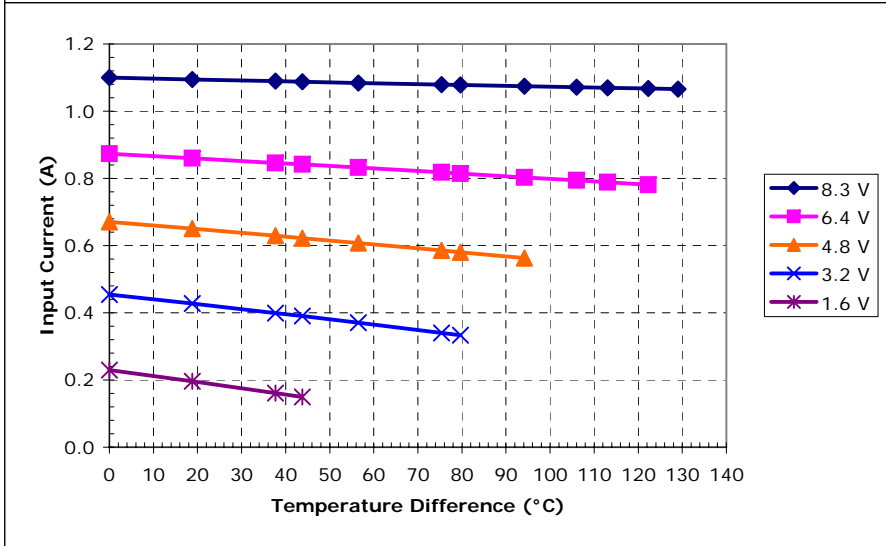
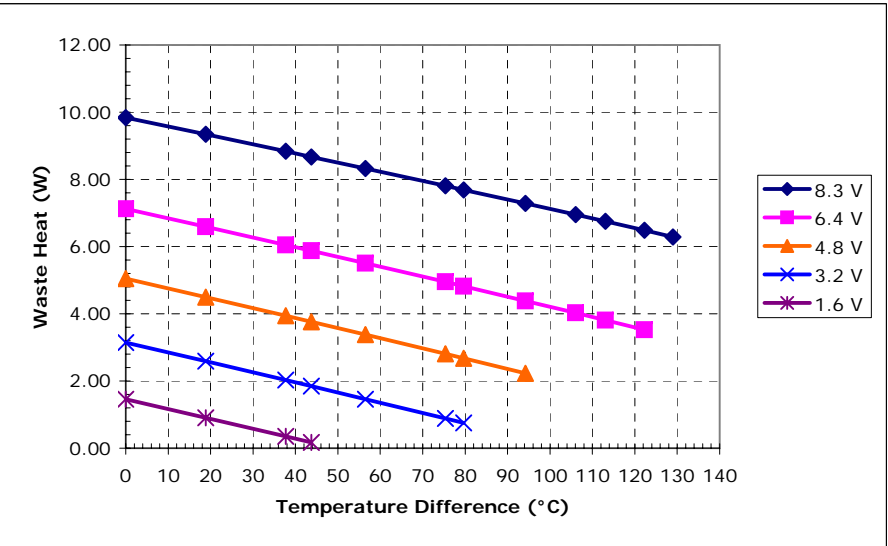
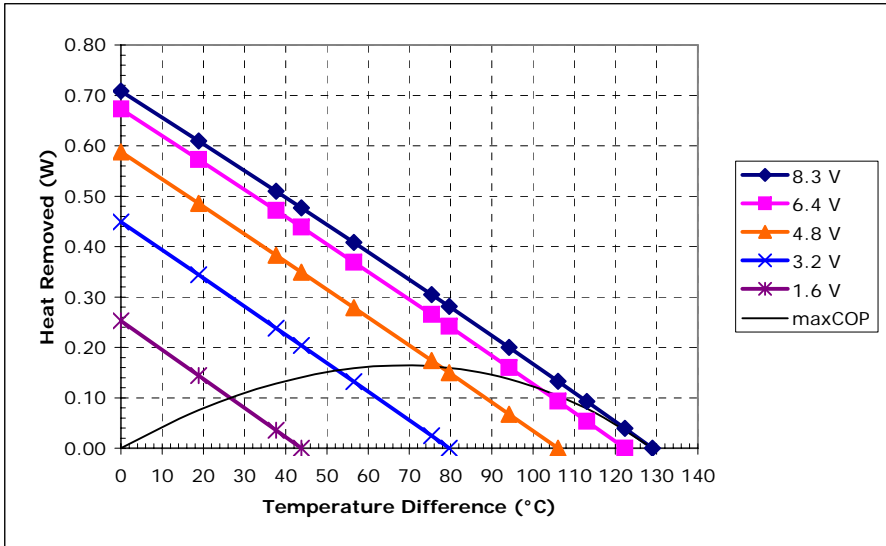
Unpotted TE-4-(59-31-11-4)-1.0 at a hot-side temperature of 50 °C



Potted TE-4-(59-31-11-4)-1.0 at a hot-side temperature of 50 °C



Unpotted TE-4-(59-31-11-4)-1.0 at a hot-side temperature of 70 °C



Potted TE-4-(59-31-11-4)-1.0 at a hot-side temperature of 70 °C