

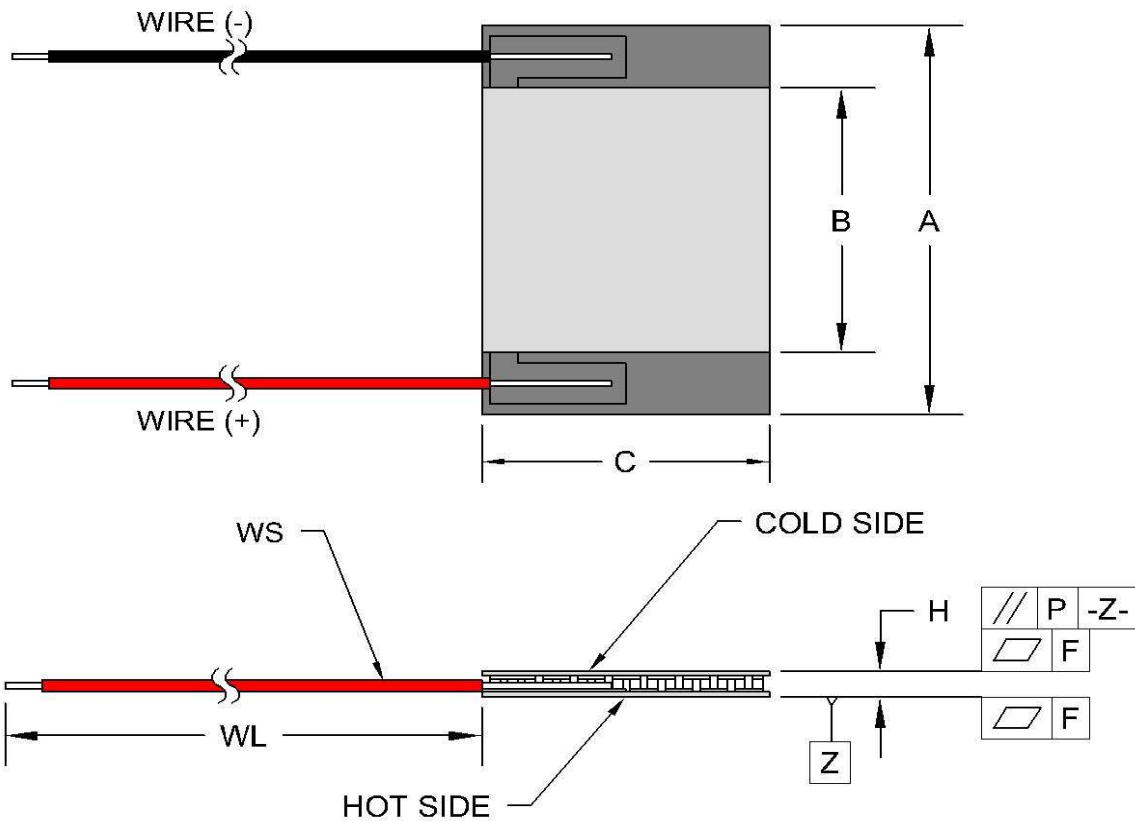
**TE-12-0.45-1.3
Thermoelectric Module
(Peltier Module)
Specifications**

	Material Specifications (27 °C hot side temperature)	Material Specifications (50 °C hot side temperature)
Vmax (V)	1.4	1.6
I _{max} (A)	0.7	0.7
Q _{max} (W)	0.6	0.7
DT _{max} (°C)	67	76
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 +/-15%.

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)	5 +0.5/-0.2
Width, B (mm)	3.4 +0.5/-0.2
Width, C (mm)	5.0 +0.5/-0.2
Height, H (mm)	2.3 ±0.15
Flatness, F (mm)	0.15
Parallelism, P (mm)	0.15
Wire Size, WS (mm ²)	0.12
Wire Length, WL (mm)	50

Optional Features and Notes:

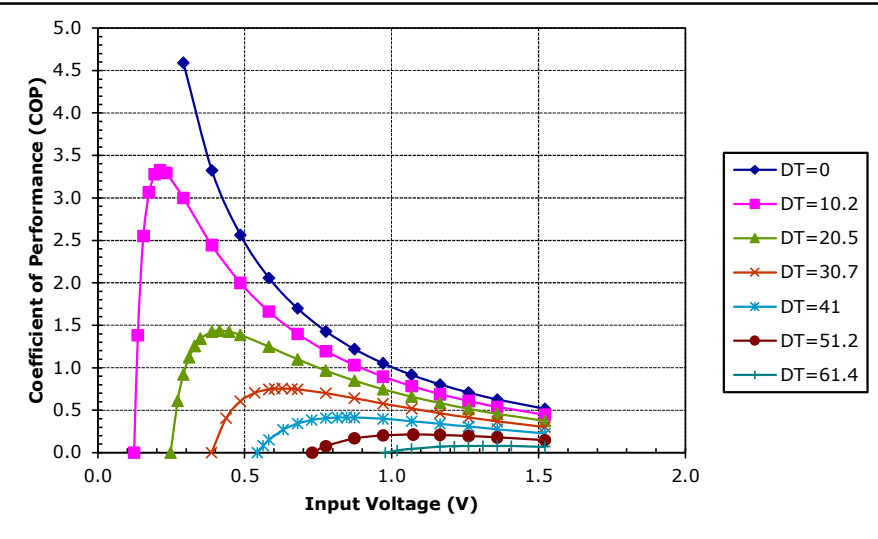
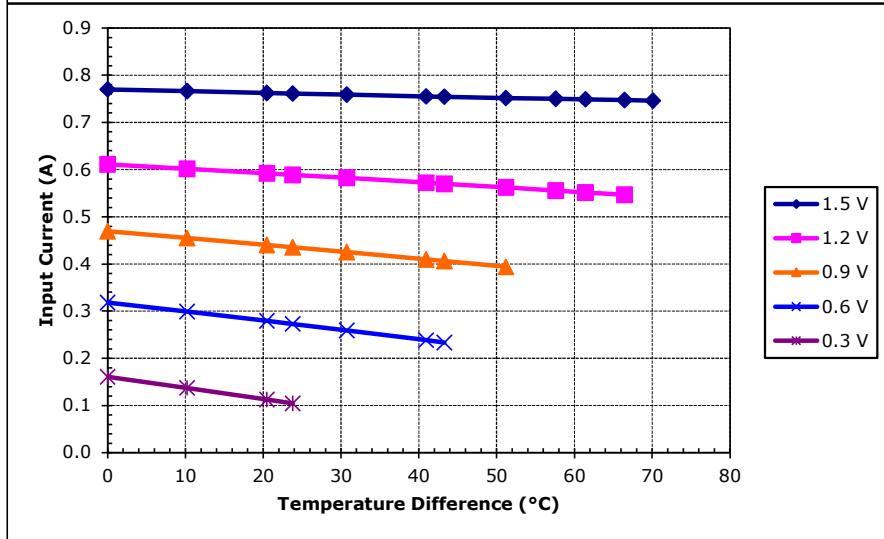
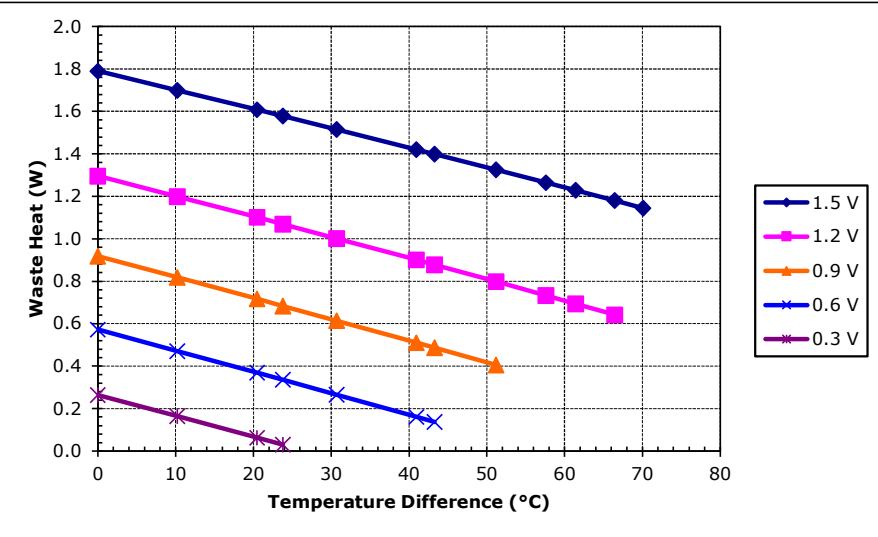
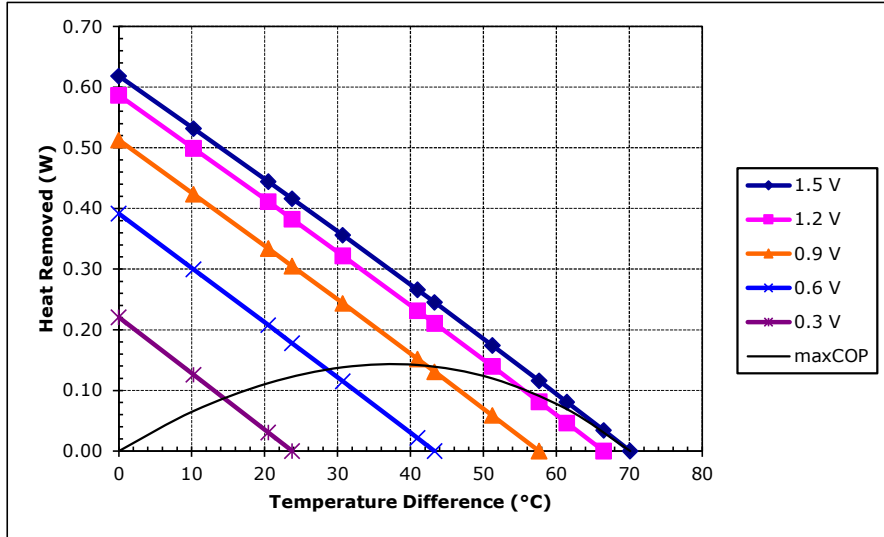
Add "P" to part number for sealing module with epoxy potting.
 "B" and "C" dimensions could increase ~1 mm due to potting.
 Module includes 30 µm nickel metallization on hot and cold sides.
 The metallization does not include pre-tinning.

Performance graphs include thermal resistance of substrates.

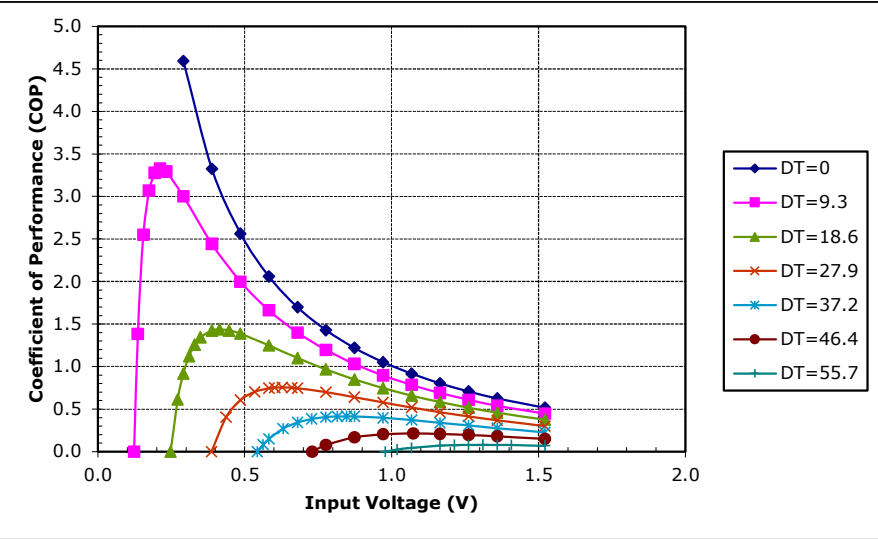
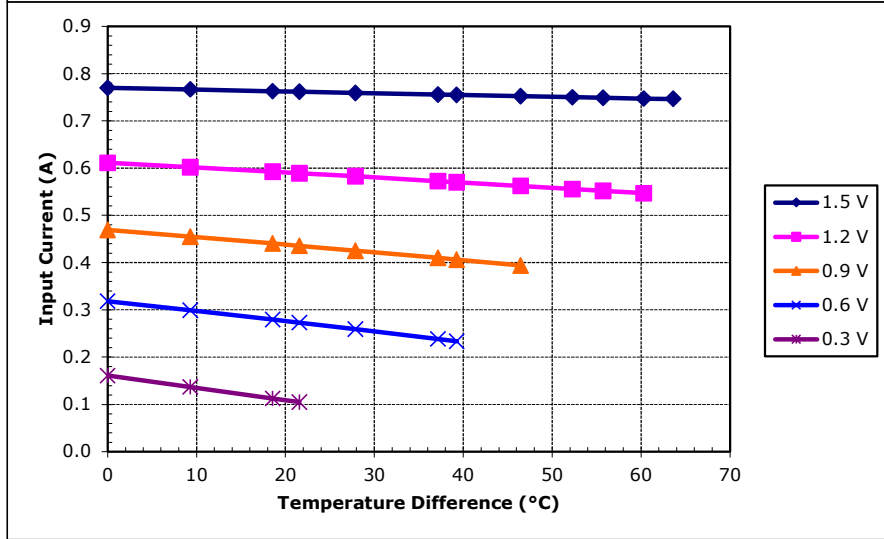
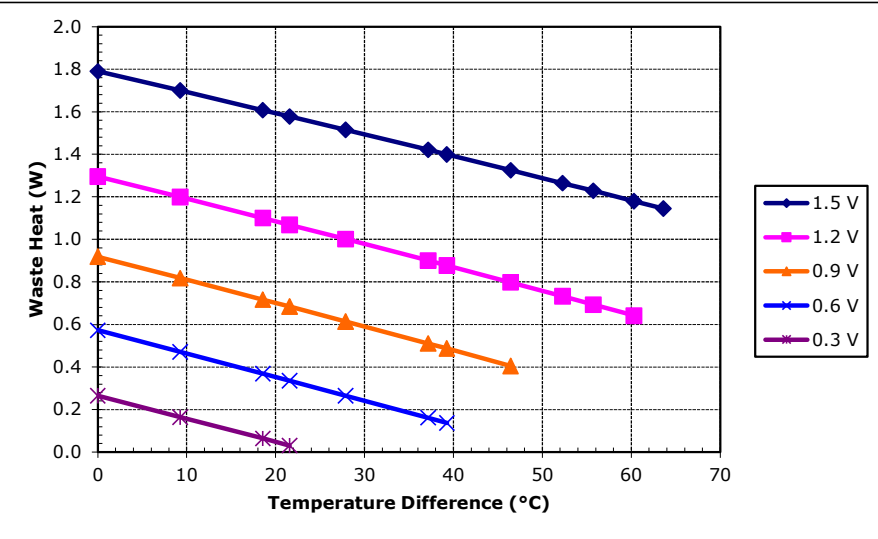
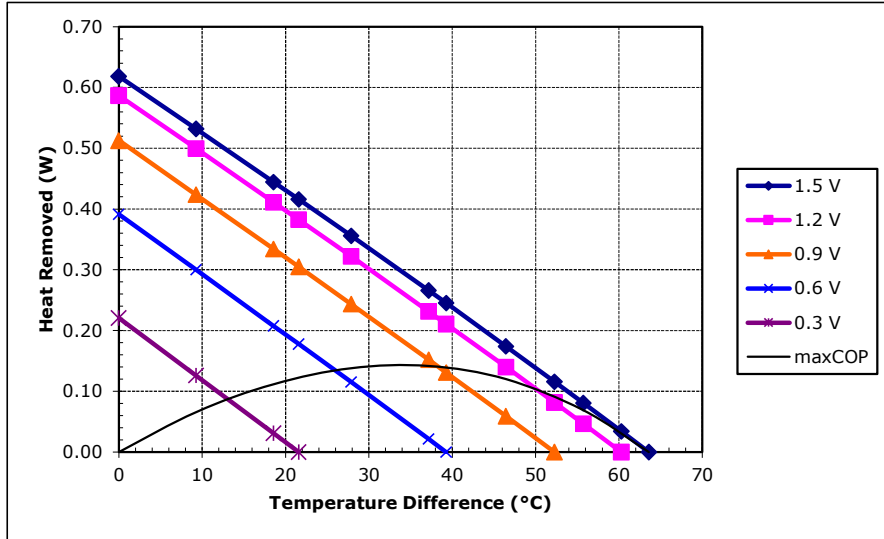
RoHS Compliant



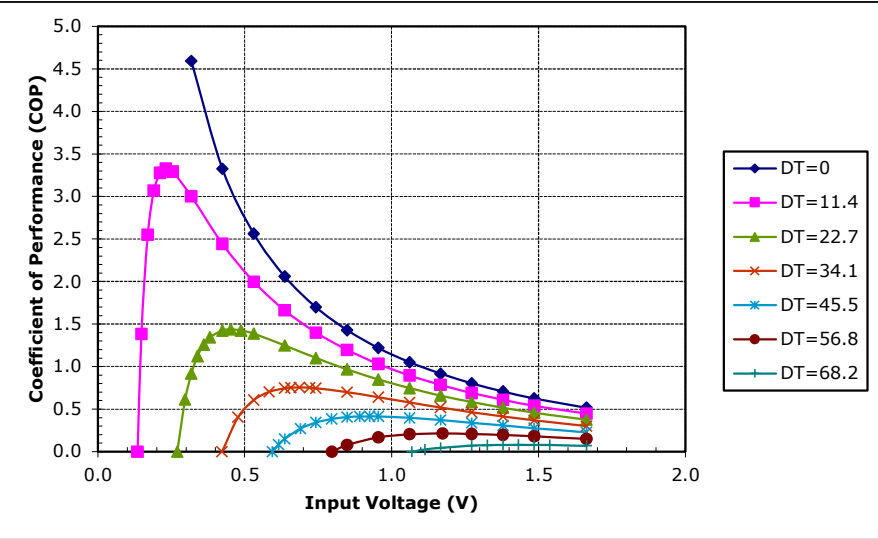
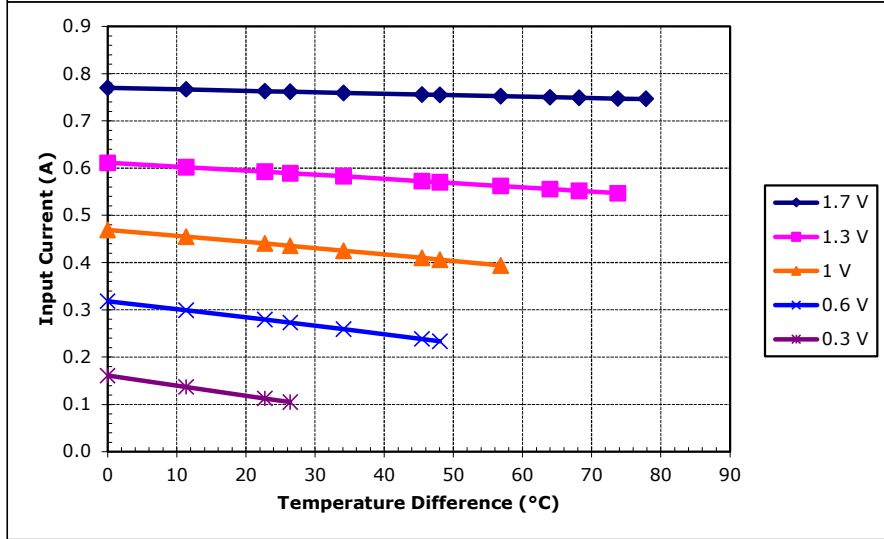
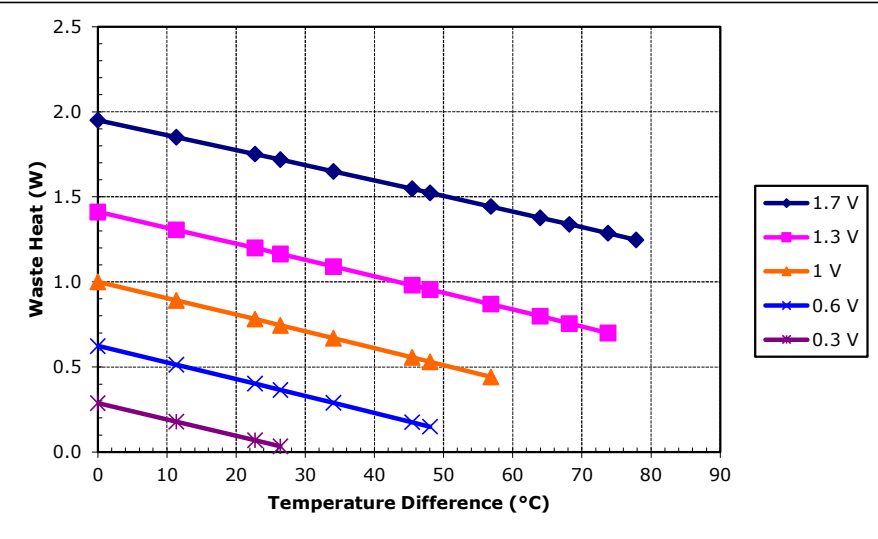
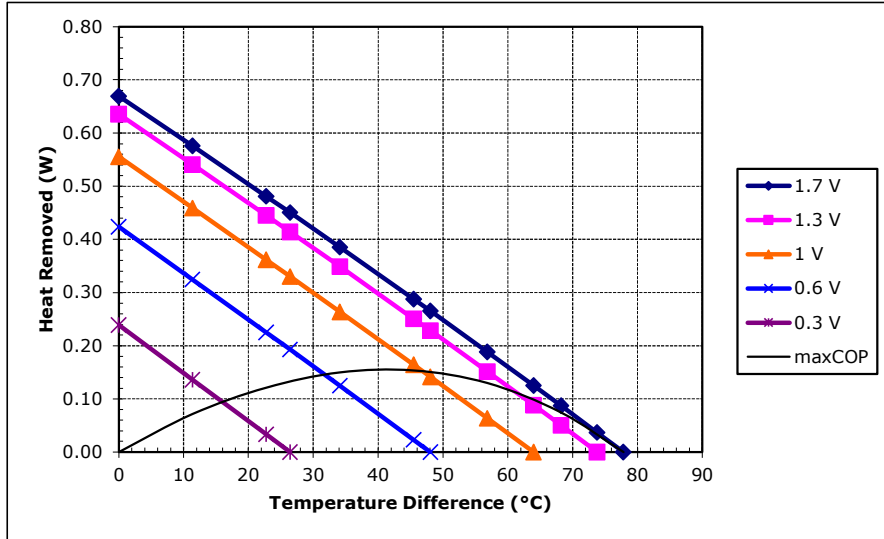
1590 Keane Drive, Traverse City, MI, 49696-8257 USA
 PH: 231-929-3966 FAX: 231-929-4163 email: cool@totech.com
 Expert Engineering, Precision Manufacturing: *Quality Thermal Solutions Delivered*



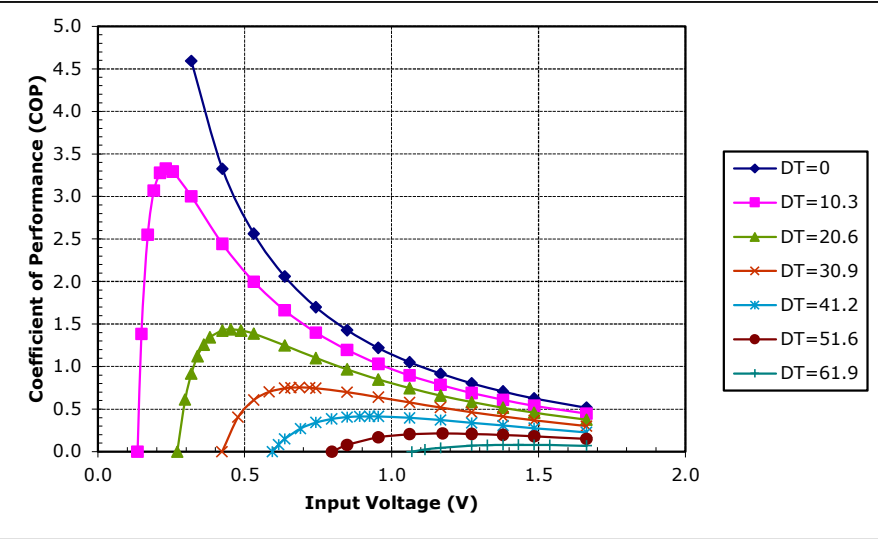
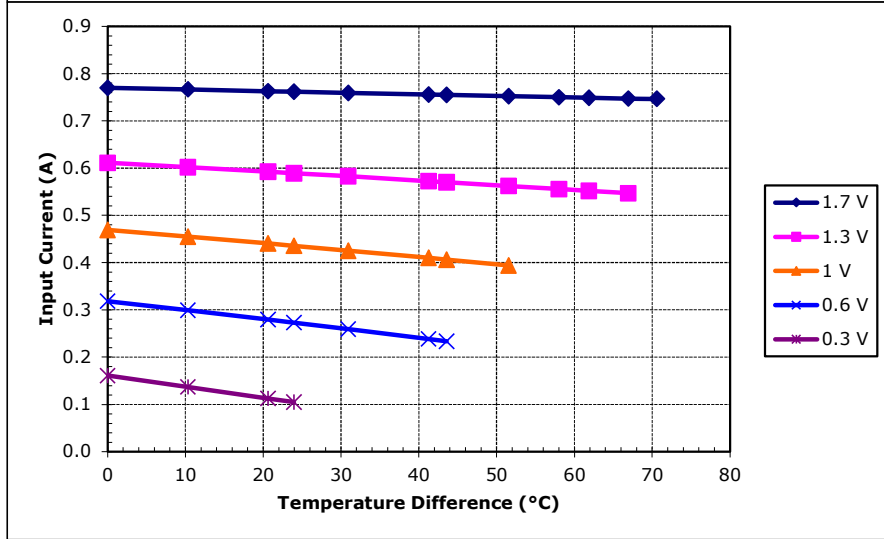
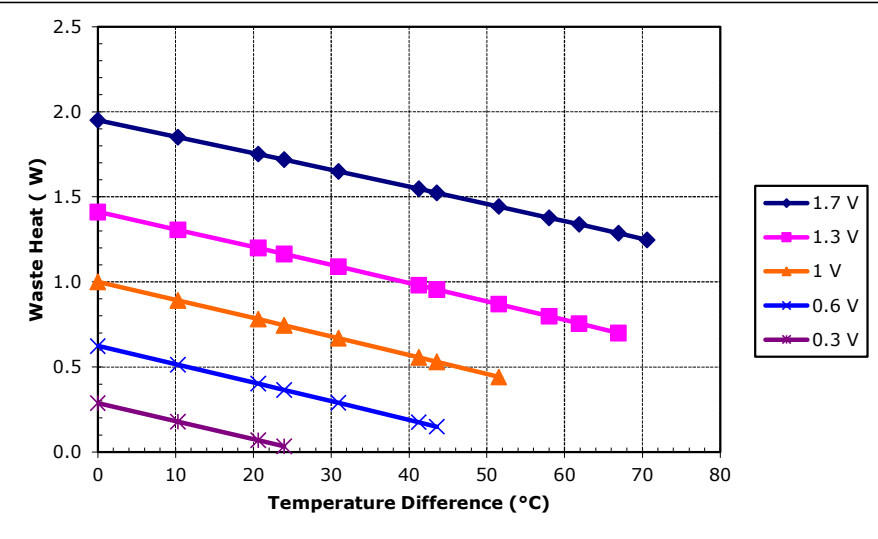
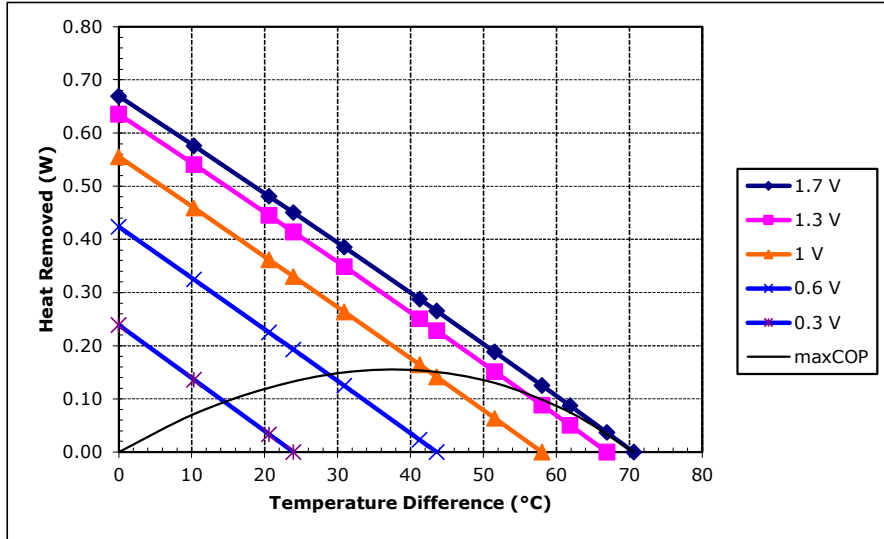
Unpotted TE-12-0.45-1.3 at a hot-side temperature of 30 °C



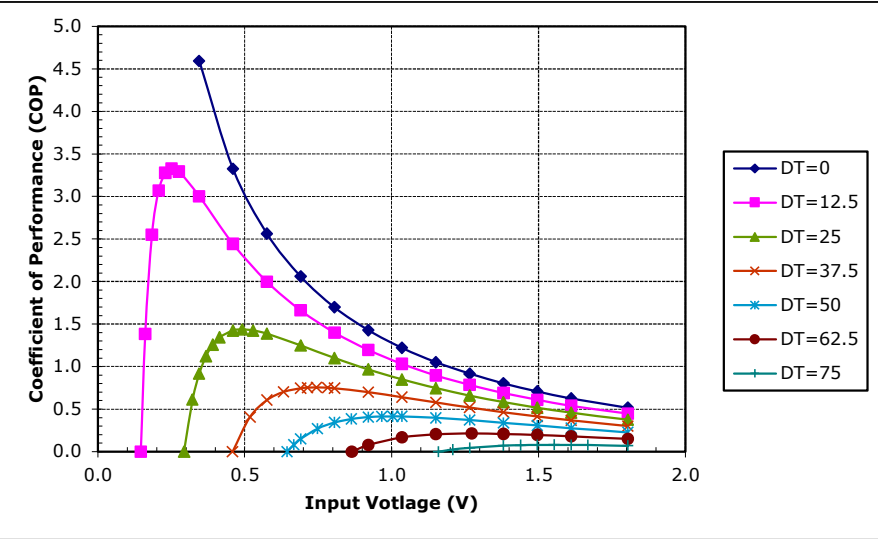
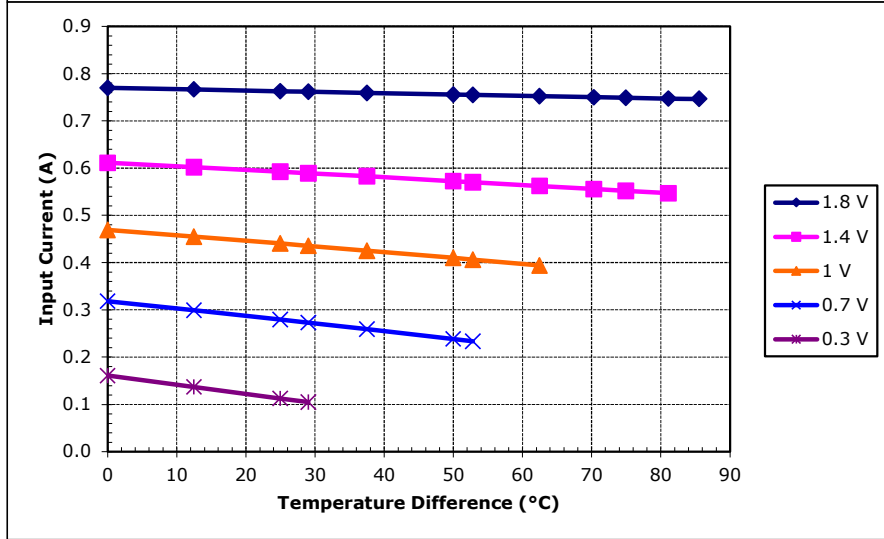
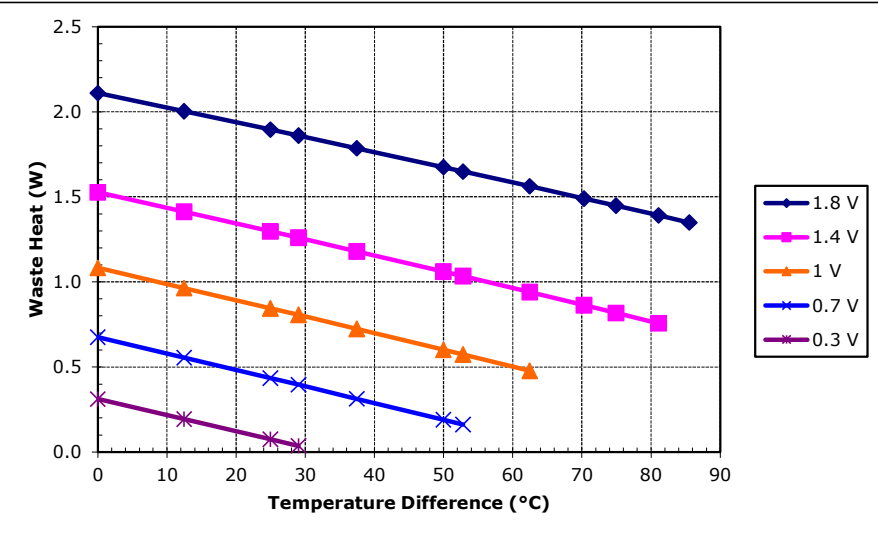
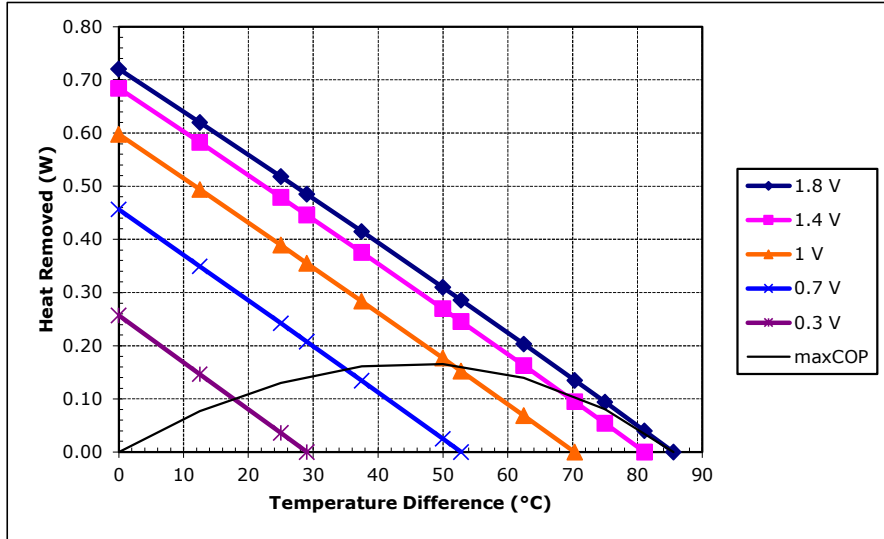
Potted TE-12-0.45-1.3 at a hot-side temperature of 30 °C



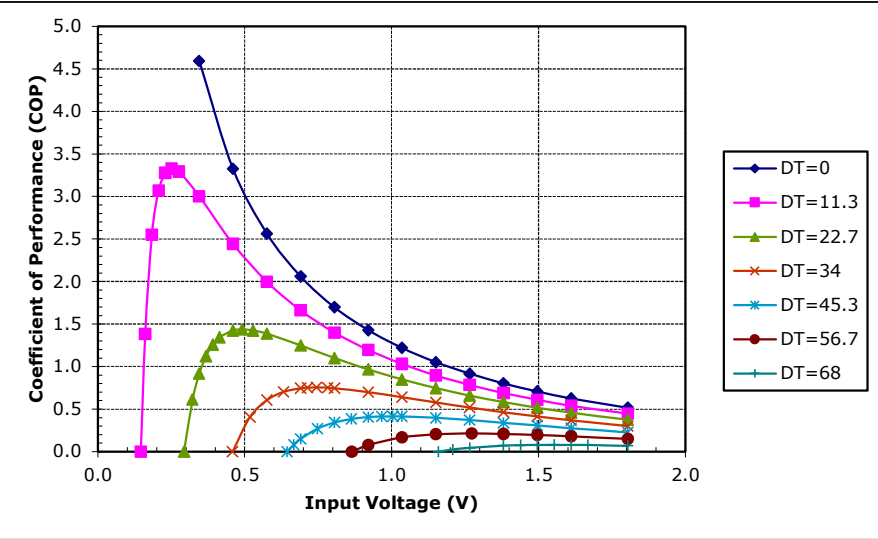
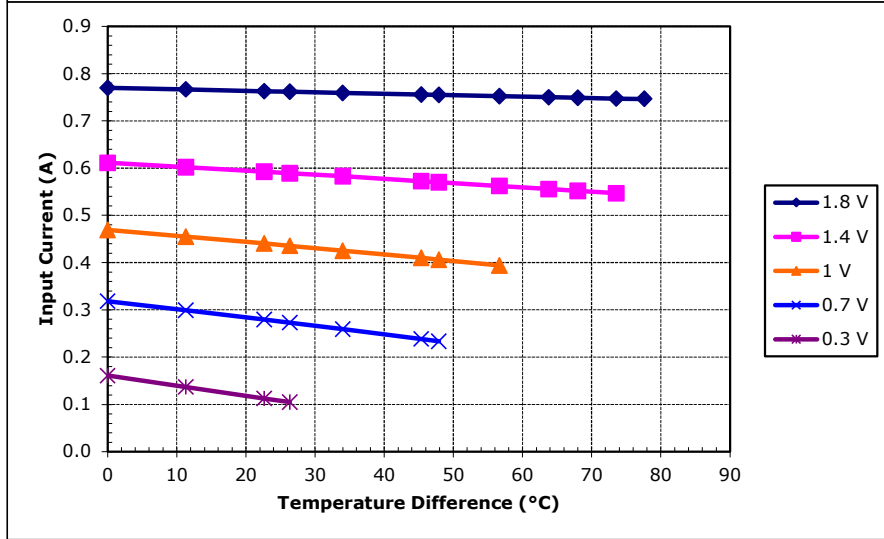
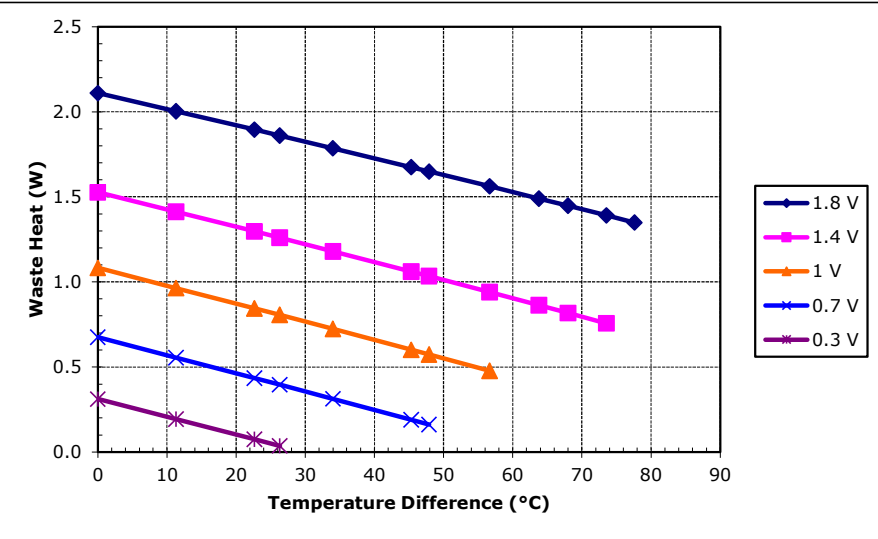
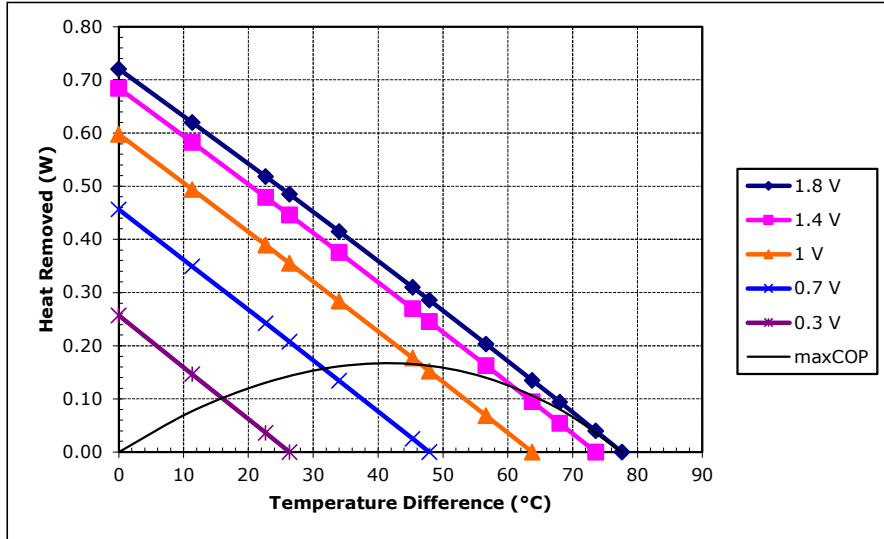
Unpotted TE-12-0.45-1.3 at a hot-side temperature of 50 °C



Potted TE-12-0.45-1.3 at a hot-side temperature of 50 °C



Unpowered TE-12-0.45-1.3 at a hot-side temperature of 70 °C



Potted TE-12-0.45-1.3 at a hot-side temperature of 70 °C