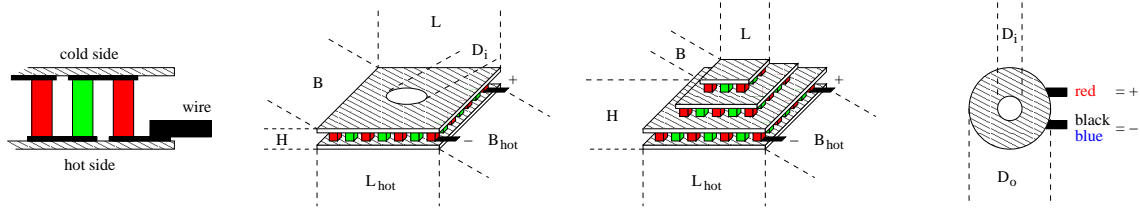


TEC1H-40-40-76/81

industrial high power peltier element



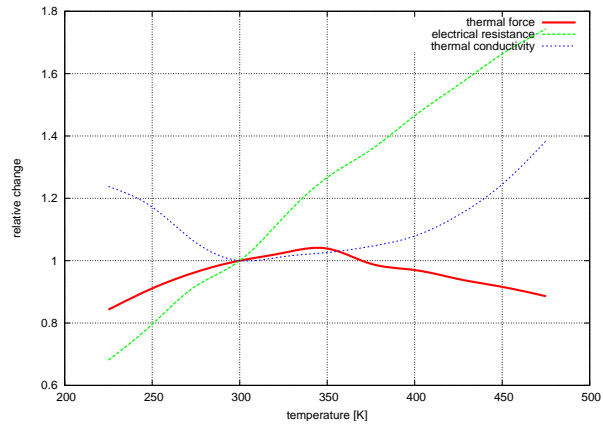
thermal and electrical data:

thermal force:

resistance:

thermal conductivity:

α_{300K}	0.0540	$\frac{V}{K}$
ρ_{300K}	2.00	Ω
γ_{300K}	0.526	$\frac{W}{K}$



available maximum operating temperatures: T_{max} 80, 120, 150(non-ROHS!), 200 °C
 typical tolerances: $\pm 5\%$

mechanical data:

size of cold side:

$$L \times B \times H \quad 40.0 \times 40.0 \times 3.90 \text{ mm}$$

size of hot side:

$$L_{hot} \times B_{hot} \quad 40.0 \times 40.0 \text{ mm}$$

height tolerance:

$$\Delta H \quad \pm 0.25 \text{ mm}$$

length and width tolerances:

$$\Delta L \text{ and } \Delta B \quad +0.5 / -0.2 \text{ mm}$$

weight:

$$m \quad 29 \text{ g}$$

ceramic plates:

BK-100 (grey), BK-96 (white) or AlN (opaque)

location of production:

Russia

experimental data:

typical values at:

		$T_h = 50^\circ C:$	$T_h = 300 K:$
maximum cooling power:	Q_{max}	76.1 W	65.6 W
	at $\Delta T = 0$ and $I_{Q_{max}}$	8.7 A	8.1 A
maximum temperature difference:	ΔT_{max}	81.2 K	72.0 K
	at $Q = 0$ and $I_{\Delta T_{max}}$	6.5 A	6.2 A
	U_{max}	17.5 V	16.2 V

order information:

TEC1H-40-40-76/81-B: max. 80°C
 TEC1H-40-40-76/81-C: max. 120°C
 TEC1H-40-40-76/81-D: max. 150°C
 TEC1H-40-40-76/81-G: max. 200°C

TEC1H-40-40-76/81-BS: sealed, max. 80°C
 TEC1H-40-40-76/81-CS: sealed, max. 120°C
 TEC1H-40-40-76/81-DS: sealed, max. 150°C
 TEC1H-40-40-76/81-GS: sealed, max. 200°C