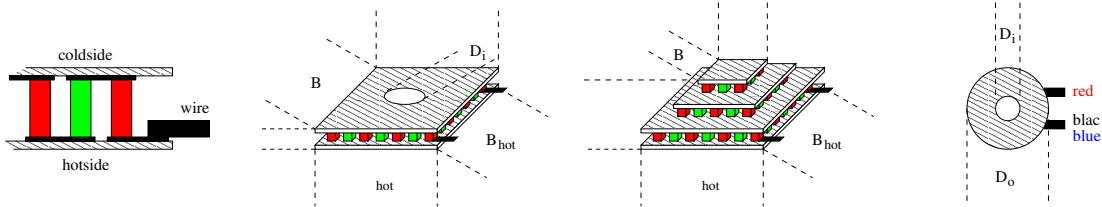


industrial standard peltier element



thermal and electrical data:

thermal force:

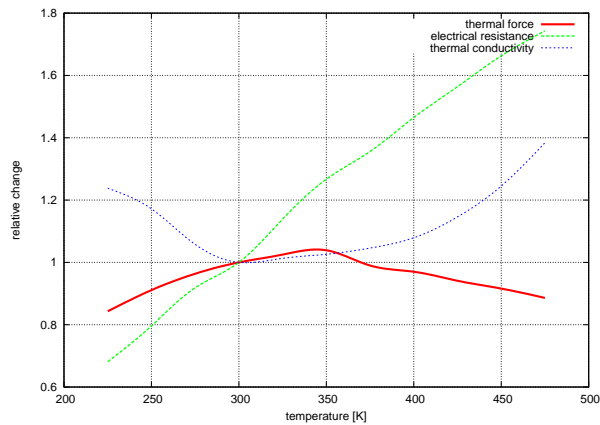
$$\alpha_{300K} \quad 0.0292 \quad \frac{V}{K}$$

resistance:

$$\rho_{300K} \quad 1.89 \quad \Omega$$

thermal conductivity:

$$\gamma_{300K} \quad 0.175 \quad \frac{W}{K}$$



available maximum operating temperatures: T_{max} 80, 120, 150(nonROHS!), 225 °C
typical tolerances: ±5%

mechanical data:

size of cold side:

$$L \times B \times H \quad 23.0 \times 23.0 \times 3.60 \text{ mm}$$

size of hot side:

$$L_{hot} \times B_{hot} \quad 23.0 \times 23.0 \text{ mm}$$

height tolerance:

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

length and width tolerances:

$$\Delta L \text{ and } \Delta B \quad +1.0 / -0.5 \text{ mm}$$

weight:

$$m \quad 9 \text{ g}$$

ceramic plates:

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

location of production:

Russia

experimental data:

typical values at:

		$T_h = 50^\circ\text{C}$:	$T_h = 300\text{K}$:
maximum cooling power:	Q_{max}	23.6 W	20.3 W
	at $\Delta T = 0$ and $I_{Q_{max}}$	5.0 A	4.6 A
maximum temperature difference:	ΔT_{max}	77.8 K	69.0 K
	at $Q = 0$ and $I_{\Delta T_{max}}$	3.8 A	3.6 A
	U_{max}	9.4 V	8.8 V

order information:

TEC1S-23-23-24/78-B: max. 80°C
TEC1S-23-23-24/78-C: max. 120°C
TEC1S-23-23-24/78-D: max. 150°C
TEC1S-23-23-24/78-G: max. 200°C

TEC1S-23-23-24/78-BS: sealed, max. 80°C
TEC1S-23-23-24/78-CS: sealed, max. 120°C
TEC1S-23-23-24/78-DS: sealed, max. 150°C
TEC1S-23-23-24/78-GS: sealed, max. 200°C