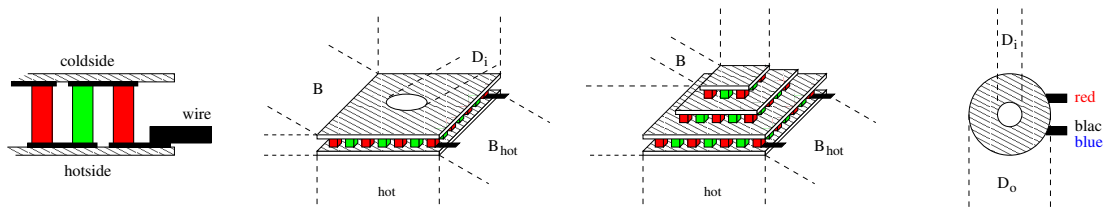


industrial standard peltier element



thermal and electrical data:

thermal force:

α_{300K}

0.00700 $\frac{V}{K}$

resistance:

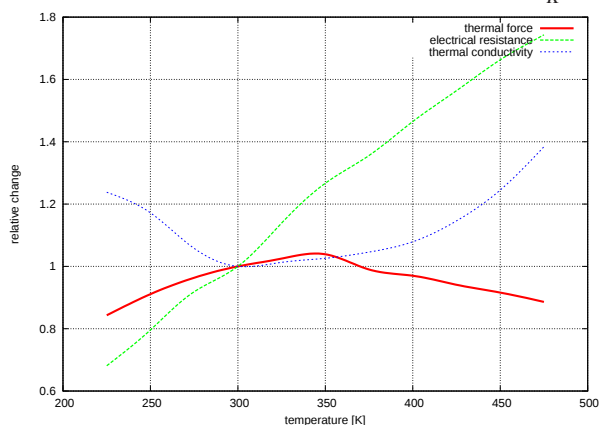
ρ_{300K}

0.205 Ω

thermal conductivity:

γ_{300K}

0.0925 $\frac{W}{K}$



available maximum operating temperatures: T_{max}

80, 120, 150(nonROHS!), 225 °C

typical tolerances:

±5 %

mechanical data:

size of cold side:

$L \times B \times H$

15.0 × 15.0 × 3.40 mm

size of hot side:

$L_{hot} \times B_{hot}$

15.0 × 15.0 mm

height tolerance:

ΔH

±0.25 mm

length and width tolerances:

ΔL and ΔB

+1.0/ -0.5 mm

weight:

m

4 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}

12.5 W

10.8 W

at $\Delta T = 0$ and

$I_{Q_{max}}$

11.1 A

10.3 A

maximum temperature difference:

ΔT_{max}

77.8 K

69.0 K

at $Q = 0$ and

$I_{\Delta T_{max}}$

8.4 A

7.9 A

U_{max}

2.3 V

2.1 V

order information:

TEC1S-15-15-12/78-B: max. 80°C

TEC1S-15-15-12/78-C: max. 120°C

TEC1S-15-15-12/78-D: max. 150°C

TEC1S-15-15-12/78-G: max. 200°C

TEC1S-15-15-12/78-BS: sealed, max. 80°C

TEC1S-15-15-12/78-CS: sealed, max. 120°C

TEC1S-15-15-12/78-DS: sealed, max. 150°C

TEC1S-15-15-12/78-GS: sealed, max. 200°C