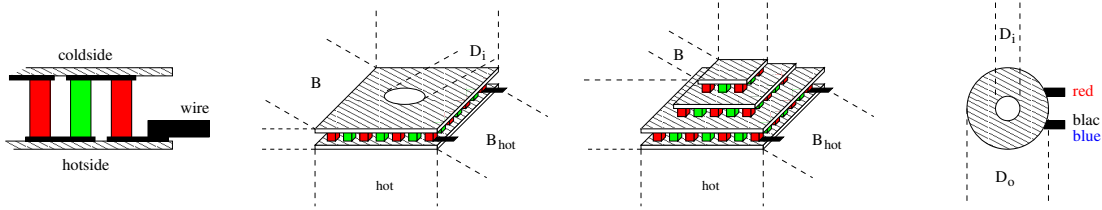


## industrial micro peltier element



### thermal and electrical data:

thermal force:

$\alpha_{300K}$

0.0264  $\frac{V}{K}$

resistance:

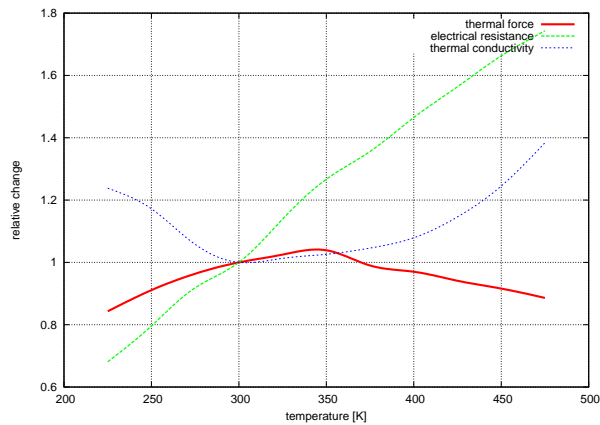
$\rho_{300K}$

2.96  $\Omega$

thermal conductivity:

$\gamma_{300K}$

0.0931  $\frac{W}{K}$



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

### mechanical data:

size of cold side:

$L \times B \times H$

12.0 × 13.0 × 2.50 mm

size of hot side:

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

12.0 × 13.0 mm

height tolerance:

$\Delta H$

$\pm 0.25$  mm

length and width tolerances:

$\Delta L$  and  $\Delta B$

+1.0/ -0.5 mm

weight:

m

2 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:

$Q_{max}$

12.3 W

10.6 W

at  $\Delta T = 0$  and

$I_{Q_{max}}$

2.9 A

2.7 A

maximum temperature difference:

$\Delta T_{max}$

76.8 K

68.0 K

at  $Q = 0$  and

$I_{\Delta T_{max}}$

2.2 A

2.1 A

$U_{max}$

8.5 V

7.9 V

### order information:

TEC1M-12-13-12/77-B: max. 80°C

TEC1M-12-13-12/77-C: max. 120°C

TEC1M-12-13-12/77-D: max. 150°C

TEC1M-12-13-12/77-G: max. 200°C