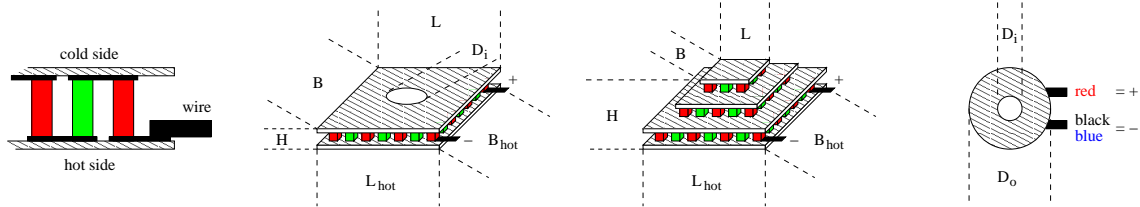


TEC1M-6.3-6.3-2.7/78

industrial micro peltier element



thermal and electrical data:

thermal force:

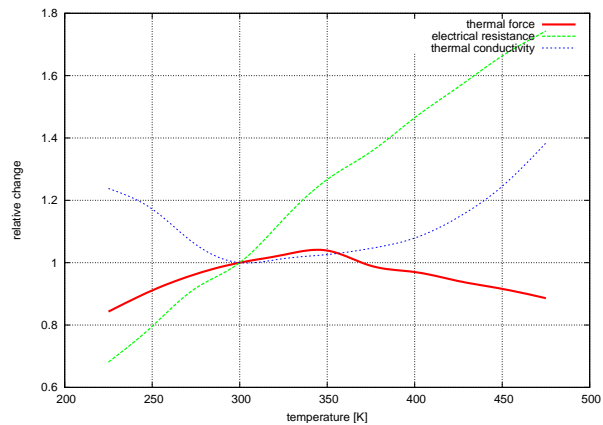
$$\alpha_{300K} \quad 0.00701 \quad \frac{V}{K}$$

resistance:

$$\rho_{300K} \quad 0.951 \quad \Omega$$

thermal conductivity:

$$\gamma_{300K} \quad 0.0200 \quad \frac{W}{K}$$



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

mechanical data:

size of cold side:

$$L \times B \times H \quad 6.3 \times 6.3 \times 2.80 \text{ mm}$$

size of hot side:

$$L_{hot} \times B_{hot} \quad 6.3 \times 6.3 \text{ mm}$$

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:

$$m \quad 1 \text{ g}$$

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} | 2.7 W | 2.3 W |
| | at $\Delta T = 0$ and $I_{Q_{max}}$ | 2.4 A | 2.2 A |
| maximum temperature difference: | ΔT_{max} | 77.8 K | 69.0 K |
| | at $Q = 0$ and $I_{\Delta T_{max}}$ | 1.8 A | 1.7 A |
| | U_{max} | 2.3 V | 2.1 V |

order information:

TEC1M-6.3-6.3-2.7/78-B: max. 80°C
 TEC1M-6.3-6.3-2.7/78-C: max. 120°C
 TEC1M-6.3-6.3-2.7/78-D: max. 150°C
 TEC1M-6.3-6.3-2.7/78-G: max. 200°C