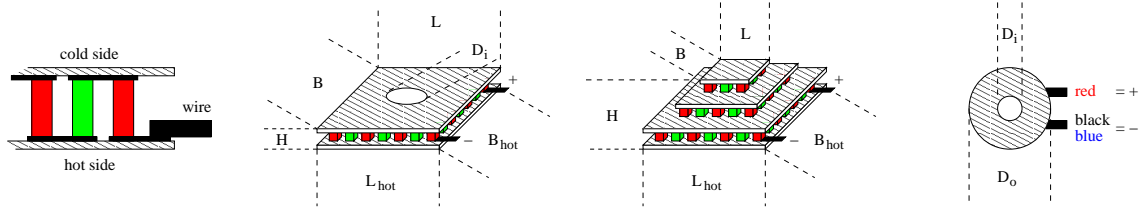


# TEC1S-8.0-8.0-1.2/79

## industrial standard peltier element



### thermal and electrical data:

thermal force:

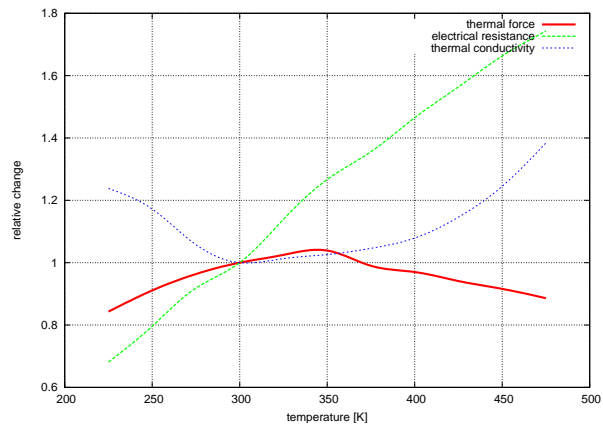
$$\alpha_{300K} = 0.00291 \frac{V}{K}$$

resistance:

$$\rho_{300K} = 0.366 \Omega$$

thermal conductivity:

$$\gamma_{300K} = 0.00875 \frac{W}{K}$$



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

### mechanical data:

size of cold side:

$$L \times B \times H = 8.0 \times 8.0 \times 4.80 \text{ mm}$$

size of hot side:

$$L_{hot} \times B_{hot} = 8.0 \times 8.0 \text{ mm}$$

height tolerance:

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

length and width tolerances:

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

weight:

$$m = 2 \text{ g}$$

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:	$Q_{max}$	1.2 W	1.0 W
	at $\Delta T = 0$ and $I_{Q_{max}}$	2.6 A	2.4 A
maximum temperature difference:	$\Delta T_{max}$	79.0 K	70.1 K
	at $Q = 0$ and $I_{\Delta T_{max}}$	1.9 A	1.8 A
	$U_{max}$	0.9 V	0.9 V

### order information:

TEC1S-8.0-8.0-1.2/79-B: max. 80°C  
 TEC1S-8.0-8.0-1.2/79-C: max. 120°C  
 TEC1S-8.0-8.0-1.2/79-D: max. 150°C  
 TEC1S-8.0-8.0-1.2/79-G: max. 200°C

TEC1S-8.0-8.0-1.2/79-BS: sealed, max. 80°C  
 TEC1S-8.0-8.0-1.2/79-CS: sealed, max. 120°C  
 TEC1S-8.0-8.0-1.2/79-DS: sealed, max. 150°C  
 TEC1S-8.0-8.0-1.2/79-GS: sealed, max. 200°C