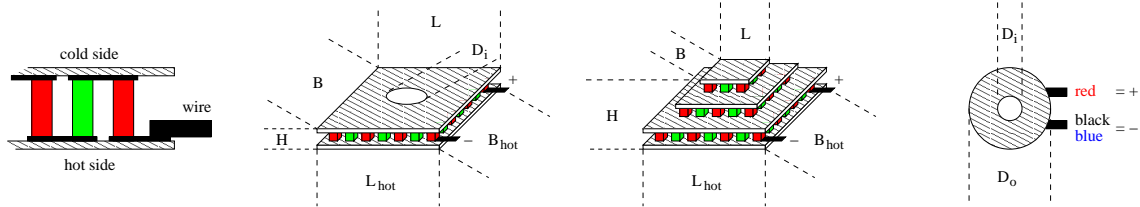


TEC1S-30-30-23/81

industrial standard peltier element



thermal and electrical data:

thermal force:

α_{300K}

0.0133 $\frac{V}{K}$

resistance:

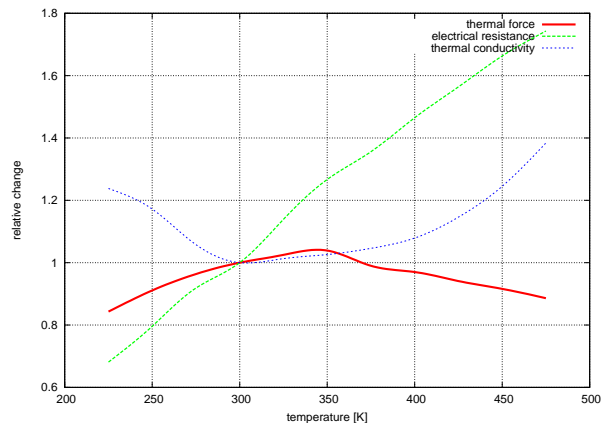
ρ_{300K}

0.401 Ω

thermal conductivity:

γ_{300K}

0.159 $\frac{W}{K}$



available maximum operating temperatures: T_{max}

80, 120, 150(non-ROHS!), 200 °C

typical tolerances:

$\pm 5\%$

mechanical data:

size of cold side:

$L \times B \times H$

30.0 × 30.0 × 4.90 mm

size of hot side:

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

30.0 × 30.0 mm

height tolerance:

ΔH

± 0.25 mm

length and width tolerances:

ΔL and ΔB

+0.5/ - 0.2 mm

weight:

m

21 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}	23.0 W	19.8 W
	at $\Delta T = 0$ and $I_{Q_{max}}$	10.7 A	9.9 A
maximum temperature difference:	ΔT_{max}	81.1 K	72.0 K
	at $Q = 0$ and $I_{\Delta T_{max}}$	8.0 A	7.6 A
	U_{max}	4.3 V	4.0 V

order information:

TEC1S-30-30-23/81-B: max. 80°C
 TEC1S-30-30-23/81-C: max. 120°C
 TEC1S-30-30-23/81-D: max. 150°C
 TEC1S-30-30-23/81-G: max. 200°C

TEC1S-30-30-23/81-BS: sealed, max. 80°C
 TEC1S-30-30-23/81-CS: sealed, max. 120°C
 TEC1S-30-30-23/81-DS: sealed, max. 150°C
 TEC1S-30-30-23/81-GS: sealed, max. 200°C