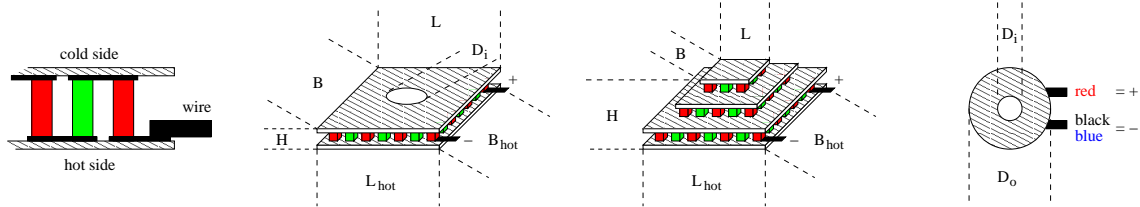


TEC1S-11-11-3.1/79

industrial standard peltier element



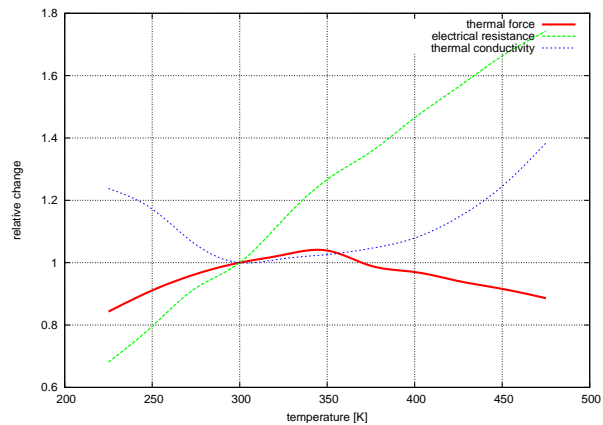
thermal and electrical data:

thermal force:

resistance:

thermal conductivity:

α_{300K}	0.00706	$\frac{V}{K}$
ρ_{300K}	0.845	Ω
γ_{300K}	0.0223	$\frac{W}{K}$



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

mechanical data:

size of cold side:

$$L \times B \times H \quad 11.5 \times 11.5 \times 4.80 \text{ mm}$$

size of hot side:

$$L_{hot} \times B_{hot} \quad 11.5 \times 11.5 \text{ mm}$$

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:

$$m \quad 3 \text{ g}$$

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}	3.1 W	2.7 W
	at $\Delta T = 0$ and $I_{Q_{max}}$	2.7 A	2.5 A
maximum temperature difference:	ΔT_{max}	79.0 K	70.0 K
	at $Q = 0$ and $I_{\Delta T_{max}}$	2.0 A	1.9 A
	U_{max}	2.3 V	2.1 V

order information:

TEC1S-11-11-3.1/79-B: max. 80°C
 TEC1S-11-11-3.1/79-C: max. 120°C
 TEC1S-11-11-3.1/79-D: max. 150°C
 TEC1S-11-11-3.1/79-G: max. 200°C

TEC1S-11-11-3.1/79-BS: sealed, max. 80°C
 TEC1S-11-11-3.1/79-CS: sealed, max. 120°C
 TEC1S-11-11-3.1/79-DS: sealed, max. 150°C
 TEC1S-11-11-3.1/79-GS: sealed, max. 200°C