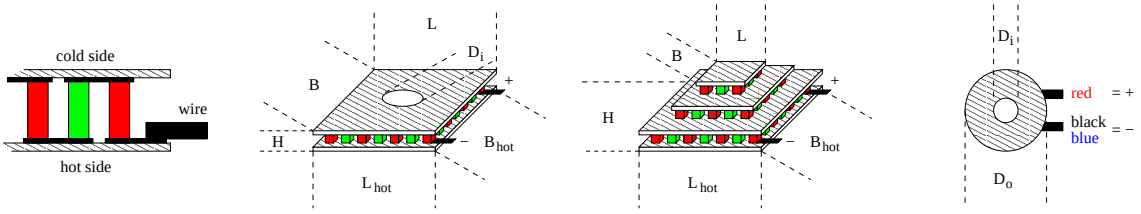
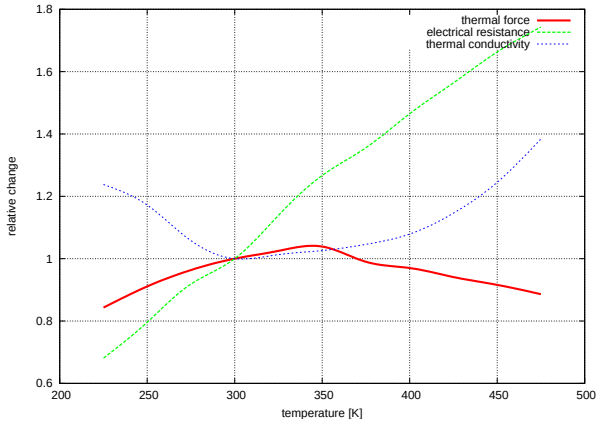
TEC1H-40-40-69/78

industrial high power peltier element



thermal and electrical data:

thermal force:	α_{300K}	0.0523	$\frac{V}{K}$
resistance:	ρ_{300K}	2.08	Ω
thermal conductivity:	γ_{300K}	0.508	$\frac{W}{K}$



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

mechanical data:

size of cold side:	$L \times B \times H$	$40.0 \times 40.0 \times 3.20\,mm$
size of hot side:	$L_{hot} \times B_{hot}$	$40.0 \times 40.0\,mm$
height tolerance:	ΔH	$\pm 0.25\,mm$
length and width tolerances:	ΔL and ΔB	$+0.5/-0.2\,mm$
weight:	m	$24\,g$
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}	$68.6\,W$	$59.1\,W$
at $\Delta T = 0$ and	$I_{Q_{max}}$	$8.1\,A$	$7.5\,A$
maximum temperature difference:	ΔT_{max}	$77.8\,K$	$69.0\,K$
at $Q = 0$ and	$I_{\Delta T_{max}}$	$6.2\,A$	$5.8\,A$
	U_{max}	$16.9\,V$	$15.7\,V$

order information:

TEC1H-40-40-69/78-B:	max. $80^\circ C$
TEC1H-40-40-69/78-C:	max. $120^\circ C$
TEC1H-40-40-69/78-D:	max. $150^\circ C$
TEC1H-40-40-69/78-G:	max. $200^\circ C$
TEC1H-40-40-69/78-BS:	sealed, max. $80^\circ C$
TEC1H-40-40-69/78-CS:	sealed, max. $120^\circ C$
TEC1H-40-40-69/78-DS:	sealed, max. $150^\circ C$
TEC1H-40-40-69/78-GS:	sealed, max. $200^\circ C$