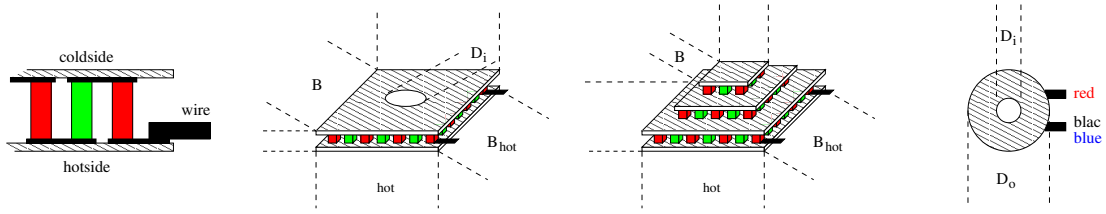
EURECA Messtechnik GmbH

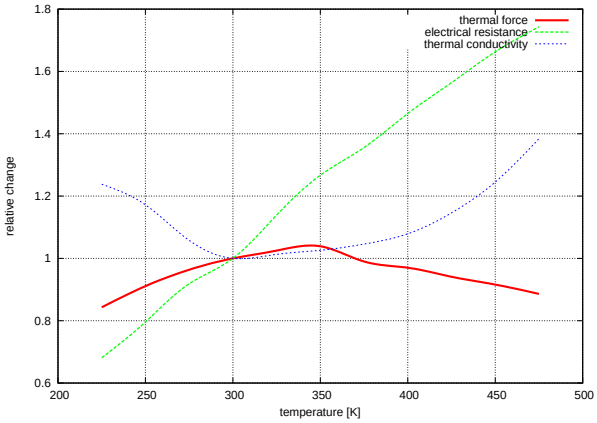
TEC1M-8.0-8.0-10/77

industrial micro peltier element



thermal and electrical data:

thermal force:	α_{300K}	$0.00695\ \frac{V}{K}$
resistance:	ρ_{300K}	$0.247\ \Omega$
thermal conductivity:	γ_{300K}	$0.0776\ \frac{W}{K}$



available maximum operating temperatures:	T_{max}	$80, 120, 150(nonROHS!), 225\ ^\circ C$
typical tolerances:		$\pm 5\,\%$

mechanical data:

size of cold side:	$L \times B \times H$	$8.0 \times 8.0 \times 2.50\,mm$
size of hot side:	$L_{hot} \times B_{hot}$	$8.0 \times 8.0\,mm$
height tolerance:	ΔH	$\pm 0.25\,mm$
length and width tolerances:	ΔL and ΔB	$+1.0/-0.5\,mm$
weight:	m	$1\,g$
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}	$10.2\,W$	$8.8\,W$
at $\Delta T = 0$ and	$I_{Q_{max}}$	$9.1\,A$	$8.5\,A$
maximum temperature difference:	ΔT_{max}	$76.7\,K$	$68.0\,K$
at $Q = 0$ and	$I_{\Delta T_{max}}$	$7.0\,A$	$6.5\,A$
	U_{max}	$2.2\,V$	$2.1\,V$

order information:

TEC1M-8.0-8.0-10/77-B: max. $80^\circ C$
TEC1M-8.0-8.0-10/77-C: max. $120^\circ C$
TEC1M-8.0-8.0-10/77-D: max. $150^\circ C$
TEC1M-8.0-8.0-10/77-G: max. $200^\circ C$