

# Peltier Elements

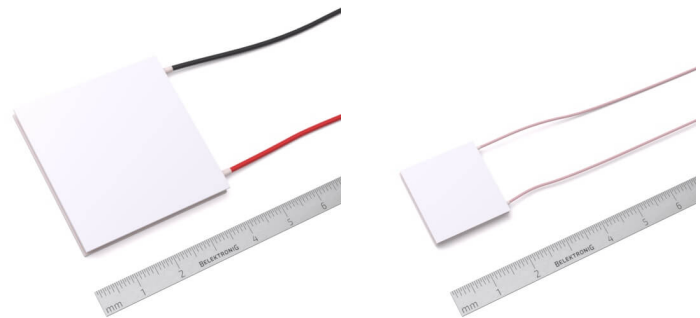
## Datasheet

### Functions

Peltier elements are thermoelectric energy converters, which can be used both for heating and for cooling samples and objects. Compared to the significantly larger compressor coolers, they have a lower efficiency. However, you do not need any refrigerant. The cooling of the hot side can be realized using heat sinks or water cooling.

### Key Features

- ✓ Useable in continuous operation up to 150 °C
- ✓ Outer material: ceramic
- ✓ Epoxy sealing prevents corrosion
- ✓ Can be used in series and parallel connection (depending on voltage of power supply)



Name / Order Number: BAT -	PE-40-01	PE-20-01
Dimensions [mm]	40 x 40 x 3.8	20 x 20 x 2.5
$Q_{Max}$ [W]	82.1	20.9
$\Delta T_{Max}$ at $T_{Hot\ side} = 25^{\circ}C$ [K]	72.5	72.5
Allowed $T_{Max}$ in continuous operation [ $^{\circ}C$ ]	150	150
$U_{Max}$ [V]	16.2	15.7
Recommended max. voltage in continuous operation	$0.8 \cdot U_{Max}$	$0.8 \cdot U_{Max}$
$I_{Max}$ [A]	7.8	2.2
Recommended max. current in continuous operation	$0.7 \cdot I_{Max}$	$0.7 \cdot I_{Max}$
Cable length [mm]	400	150
Minimal cycling stability (60 s on/60 s off) [cycles]	60,000	60,000