

# フレキシブル面状発熱体

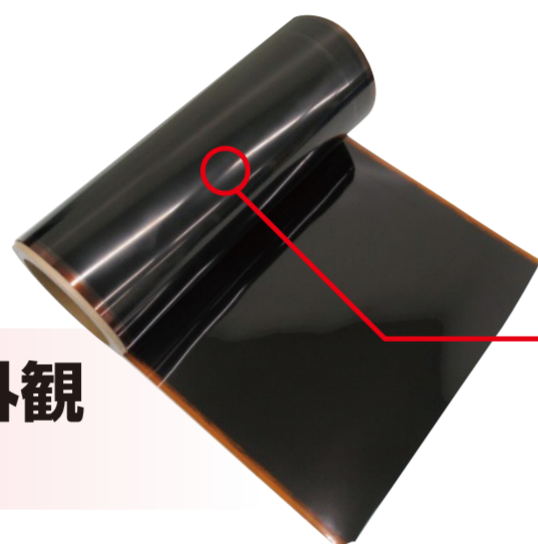
Flexible surface heating elements

## モバイルバッテリーで速暖できるヒーター素子

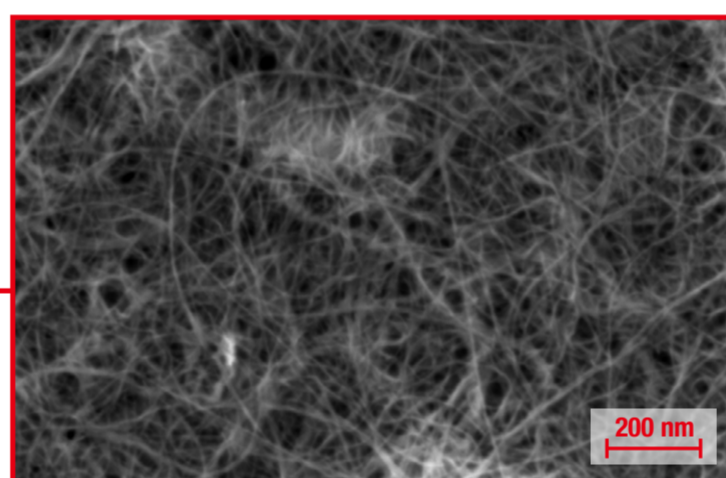
Heating element that can be heated quickly using a mobile battery

### 特徴 | Characteristics

- 低抵抗なCNTフィルム  
Low resistance
- CNTが面内でランダムに分散  
Well-dispersed CNT
- 柔軟で屈曲時に抵抗変化しない  
Flexible



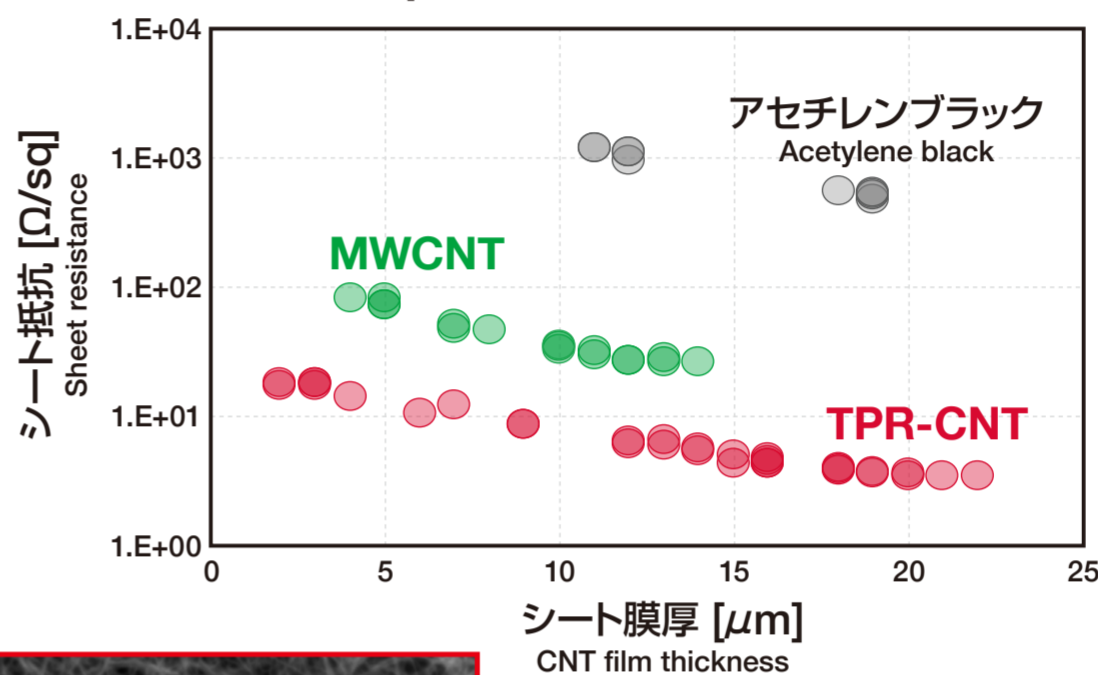
CNTフィルム外観  
CNT film appearance



CNTフィルム表面のSEM像  
SEM image of CNT film

### カーボン塗工膜の表面抵抗比較

Comparison of sheet resistance



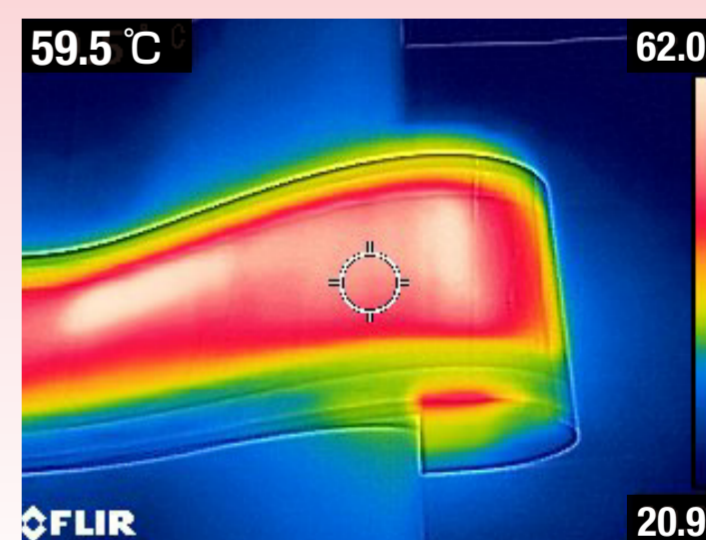
### 用途: 面状発熱体 | Applications: Surface heating elements

- 早い昇温/降温度特性  
Rapid rise and fall temperature
- 薄膜で柔軟性のある発熱体  
Thin and flexible heating element
- 設計の自由度が高い  
High degree of freedom in design
- 様々な用途に対応可能  
Can be used in a variety of applications

#### ヒーター外観 Appearance of heater

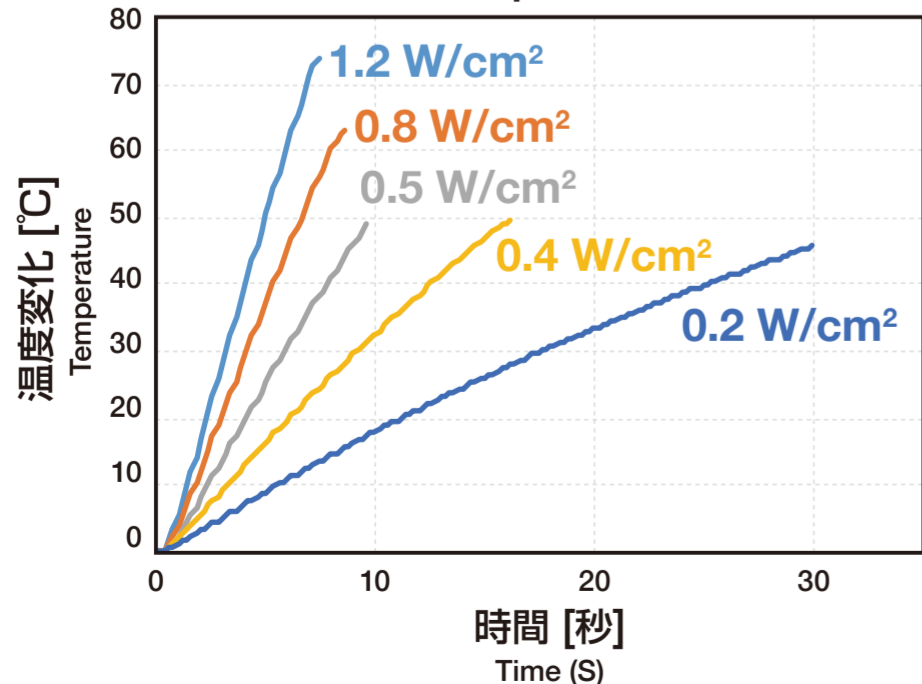


#### 発熱の様子 Heating Condition



本発熱体は、株式会社 樫の木製作所との共同試作品です  
This heating element was developed in collaboration with Oak-trees, INC.

#### 昇温特性 Heater performance



### 用途例 | Applications

