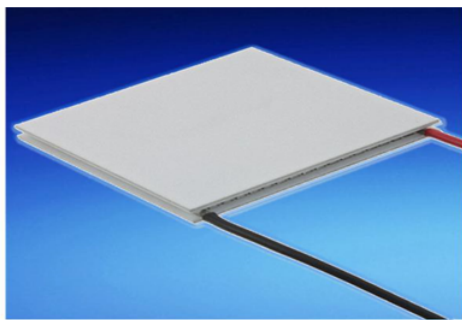


Data Sheet

Technical Data Sheet for TES1-127040-30x30 S W150mm

Single-Stage Thermoelectric Module



PERFORMANCE PARAMETERS

| Hot Side Temperature (°C) | 25°C | 50°C |
|---------------------------|------|------|
| Q_{max} (watts): | 34 | 37 |
| ΔT_{max} (°C): | 67 | 75 |
| I_{max} (amps): | 4 | 4 |
| V_{max} (vdc): | 15.4 | 16.3 |
| AC Resistance (ohms): | 3.37 | 3.80 |

**Tolerances for thermal and electrical parameters are $\pm 10\%$.

PRODUCT FEATURES

- Precise temperature control
- Compact geometric sizes and lightweight
- Reliable solid state operation
- No sound or vibration
- Environmentally friendly
- DC operation
- RoHS REACH Compliant

MANUFACTURING SPECIFICATIONS

| | |
|-----------------------------|---|
| Sealer | RTV |
| Ceramic Plate | Blank Ceramics (96% Al ₂ O ₃) |
| Lead Wires | PVC 24AWG |
| Lead Wire Length | 150 \pm 5mm |
| Solder Construction | 138° C |
| Module Size (mm) | 30 \pm 0.1, 30 \pm 0.1, 30 \pm 0.1, 3.2 \pm 0.2 |
| Flatness/Parallelism | 0.05 / 0.05 mm |
| Marking | P/N & S/N printed on cold side <u>surface</u> |

OPERATION CAUTIONS

- For maximum reliability, storage and operation below 90°C in a non-condensing environment is recommended.
- Do not exceed I_{max} or V_{max} when operating module.
- To minimize thermal stress, use linear/proportional temperature control or a similar method rather than an ON/OFF method.

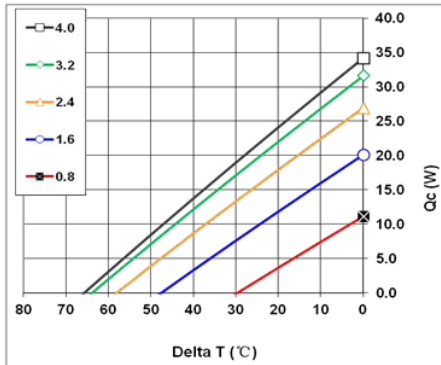
INSTALLATION

For installation assistance, please consult P&N Technology.

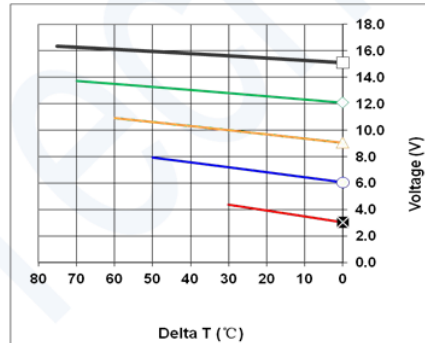
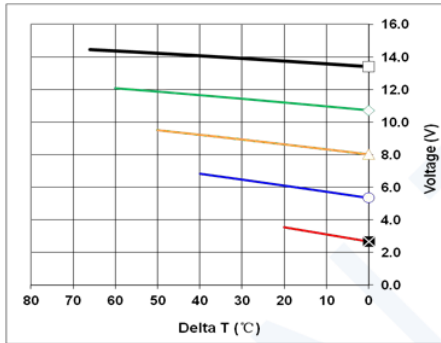
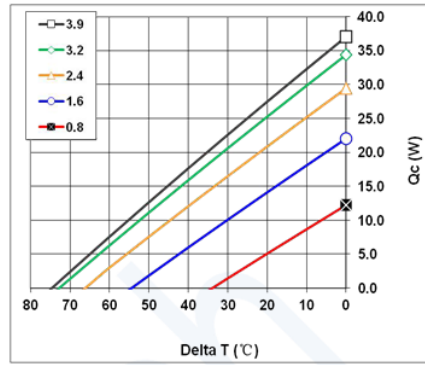
Data Sheet

PERFORMANCE CURVES

Hot Side Temperature 25°C



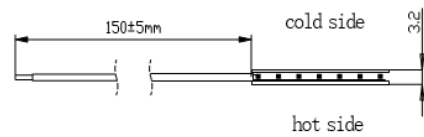
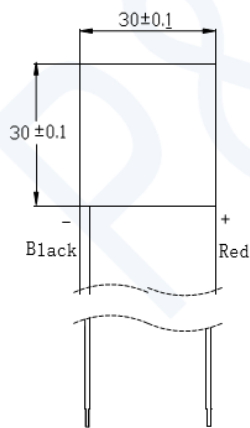
Hot Side Temperature 50°C



Delta T (°C)

Delta T (°C)

MECHANICAL DRAWING



**All units are in millimeters unless otherwise stated.