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# TES1-07103T125

- **Thermo-Electric Cooling Element**
- **$Q_{max}$: 14.9 W**
- **23 x 23 x 3.9 mm**
- **Ceramic Plates**
- **RoHS Compliant**

## Description

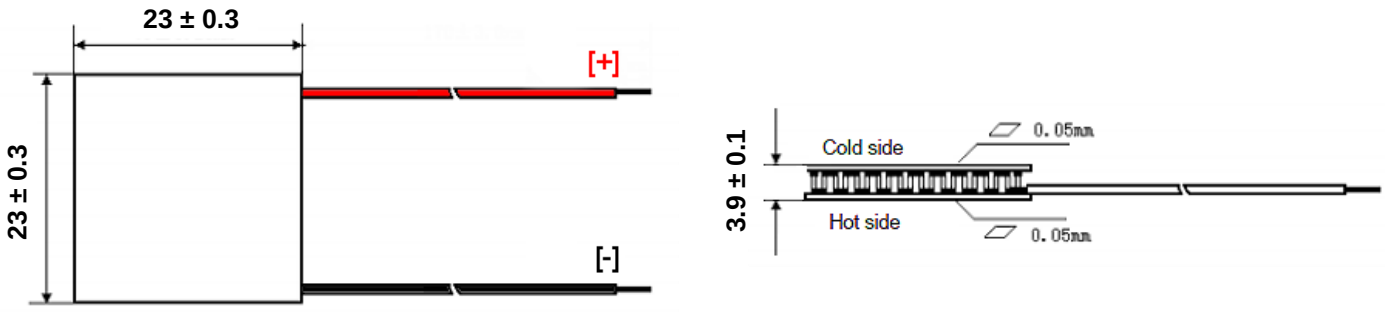
**TES1-07103T125** is a **1-stage** thermo-electric colling (**TEC**) element, consisting of **71 couples**, with a maximum cooling capacity of **14.9 W**, and max. operating temperature of **125 °C**. It features ceramic plates with silicone sealant and heat resistant wires. Variants with without sealant or with epoxy sealant are available on request.

## Specifications ($T_H$ = 27°C)

| Parameter | Symbol | Value* | Unit |
|---|---|---|---|
| Maximum Current [$\Delta T_{max}$] | $I_{max}$ | 3.0 | A |
| Maximum Voltage [$\Delta T_{max}$] | $U_{max}$ | 8.5 | V |
| Internal Resistance [$T_H$ = 27°C] | R | 2.05 | Ω |
| Maximum Cooling Capacity [$I_{max}$, $V_{max}$, ΔT = 0°C] | $Q_{max}$ | 14.9 | W |
| Maximum Temperature Difference [$I_{max}$, $V_{max}$, Q = 0 W] | $\Delta T_{max}$ | 67 | **°C** |
| Maximum Operating Temperature | $T_{max}$ | 125** | °C |
| Solder Melting Point | $T_{sol}$ | 138*** | °C |
| Maximum Recommended Plate Pressure | $P_{PLT}$ | 98.0 | N/cm² |
| Dimensions | | 23 x 23 x 3.9 | mm |
| Length of Leads [20 AWG] | | ~ 150 | mm |

* Tolerance ±10%
** $T_{MAX}$ of 150°C and 200°C optionally available
*** $T_{SOL}$ of 238°C optionally available

## Outline Dimensions




**All dimensions in mm**