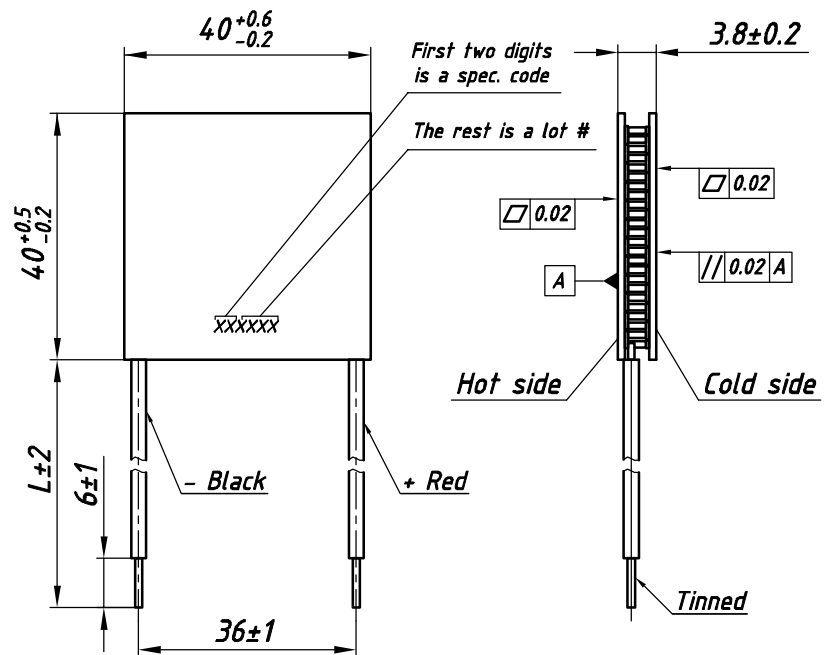


**TECHNICAL DATA**

|                                                                      |                               |                                 |
|----------------------------------------------------------------------|-------------------------------|---------------------------------|
| $U_{max}$                                                            | 18.7 V                        | $T_{hot}=25^{\circ}C$<br>Vacuum |
| $Q_{max}$                                                            | 46.0 W                        |                                 |
| $\Delta T_{max}$                                                     | 72°                           |                                 |
| $I_{max}$                                                            | 4.2 A                         |                                 |
| ACR at 25°C                                                          | 3.93 Ohm                      |                                 |
| Pad type                                                             | Hot side                      | Ceramics $Al_2O_3$ , white 96%  |
|                                                                      | Cold side                     |                                 |
| Max. processing temperature                                          | Depends on chosen solder type |                                 |
| Standard tolerances for thermal and electrical parameters $\pm 10\%$ |                               |                                 |

**MODULE DRAWING**  
standard design



**STANDARD ORDERING OPTIONS**

| Nº | Option                  | Parameter                                  |
|----|-------------------------|--------------------------------------------|
| 1  | Lead wires              | AWG Nº                                     |
|    |                         | 18                                         |
|    |                         | 20                                         |
| 2  | Lead wires length       | L - under customer request                 |
|    |                         |                                            |
| 3  | Lead wires insulation   | Type / Max. processing temp.               |
|    |                         | Without insulation / See solder type m.p.t |
|    |                         | PVC-1 / 85° C                              |
|    |                         | PVC-2 / 105° C                             |
|    |                         | Silicone / 180° C                          |
| 4  | Internal solder         | Type / Max. processing temp.               |
|    |                         | Type-1 / 138° C                            |
|    |                         | Type-2 / 183° C *                          |
|    |                         | Type-3 / 227° C                            |
| 5  | Anticorrosional coating | yes                                        |
|    |                         | no                                         |
| 6  | Sealing                 | Type / Max. processing temp.               |
|    |                         | Without sealing / 200° C                   |
|    |                         | Epoxy / 130° C                             |
|    |                         | Silicone / 180° C                          |

**AVAILABLE MODIFICATIONS**

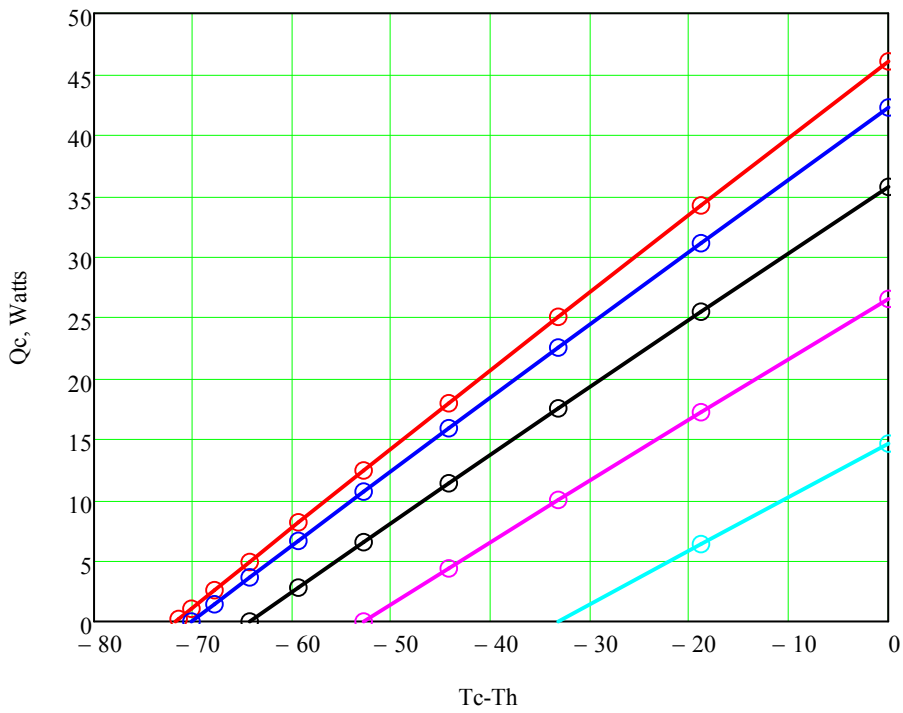
| Design            | Description                                                         |
|-------------------|---------------------------------------------------------------------|
| TMC-161-1.2-4.5 M | High reliable version on cold side for thermal cycling applications |

**OPTIONS UPON REQUEST**

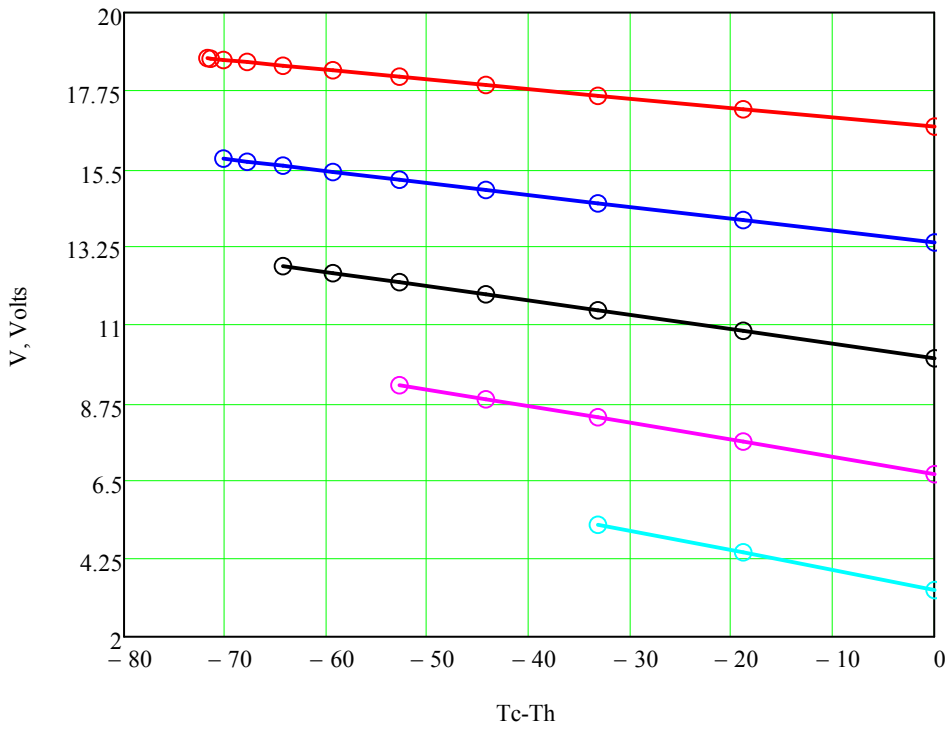
|                               |            |
|-------------------------------|------------|
| Height tolerance              | $\pm 0.02$ |
| Unflatness and nonparallelism | $\pm 0.02$ |
| Porch-style design            |            |

- Solder type marked \* is not compliant to RoHS (2002/95/EC)
- For another options consult of our technical support engineers

Performance graphs for TM-161-1.2-4.5 module at Th=25 °C  
Environment: vacuum



- $I = I_{max}$
- $I = 0.8I_{max}$
- $I = 0.6I_{max}$
- $I = 0.4I_{max}$
- $I = 0.2I_{max}$



- $I = I_{max}$
- $I = 0.8I_{max}$
- $I = 0.6I_{max}$
- $I = 0.4I_{max}$
- $I = 0.2I_{max}$