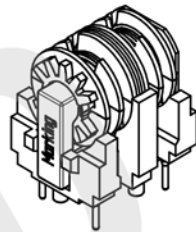
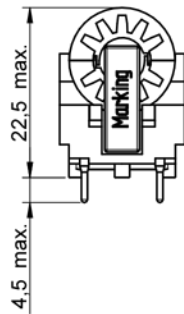
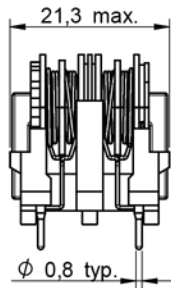
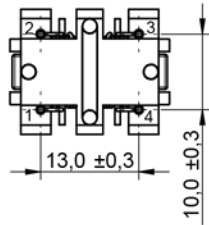


## Dimensions: [mm]

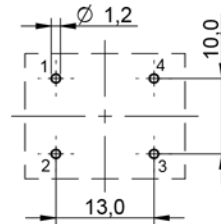


Scale - 1:1

## Product Marking:

|         |            |
|---------|------------|
| Marking | 7448640411 |
|---------|------------|

## Recommended Land Pattern: [mm]



Scale - 1:1

## Schematic:



## Electrical Properties:

| Properties              |                 | Test conditions     | Value | Unit   | Tol. |
|-------------------------|-----------------|---------------------|-------|--------|------|
| Number of windings      | N               |                     | 2     |        |      |
| Inductance              | L               | 10 kHz/ 100 mV      | 3.3   | mH     | min. |
| Inductance              | L               | 10 kHz/ 100 mV      | 4.3   | mH     | typ. |
| Rated Current           | I <sub>R</sub>  | @ 70 °C/ ΔT < 55 K  | 1.5   | A      | max. |
| DC Resistance           | R <sub>DC</sub> | @ 20 °C             | 0.21  | Ω      | ±15% |
| Rated Voltage           | V <sub>R</sub>  | 50 Hz               | 250   | V (AC) | max. |
| Insulation Test Voltage | V <sub>T</sub>  | 50 Hz/ 5 mA/ 2 sec. | 2000  | V (AC) |      |

## Certification:

|                         |                                       |
|-------------------------|---------------------------------------|
| RoHS Approval           | Compliant [ 2011/65/EU&2015/863 ]     |
| REACH Approval          | Conform or declared [ (EC)1907/2006 ] |
| Component Qualification | AEC-Q200 Grade 1                      |

## General Information:

|                                                                                                             |                     |
|-------------------------------------------------------------------------------------------------------------|---------------------|
| It is recommended that the temperature of the component does not exceed +125 °C under worst case conditions |                     |
| Operating Temperature                                                                                       | -40 up to +125 °C   |
| Ambient Temperature (referring to I <sub>R</sub> )                                                          | -40 up to +70 °C    |
| Storage Conditions (in original packaging)                                                                  | < 40 °C ; < 75 % RH |
| Moisture Sensitivity Level (MSL)                                                                            | 1                   |
| Temperature Rise < 55 K                                                                                     |                     |
| Test conditions of Electrical Properties: +20 °C, 33 % RH if not specified differently                      |                     |



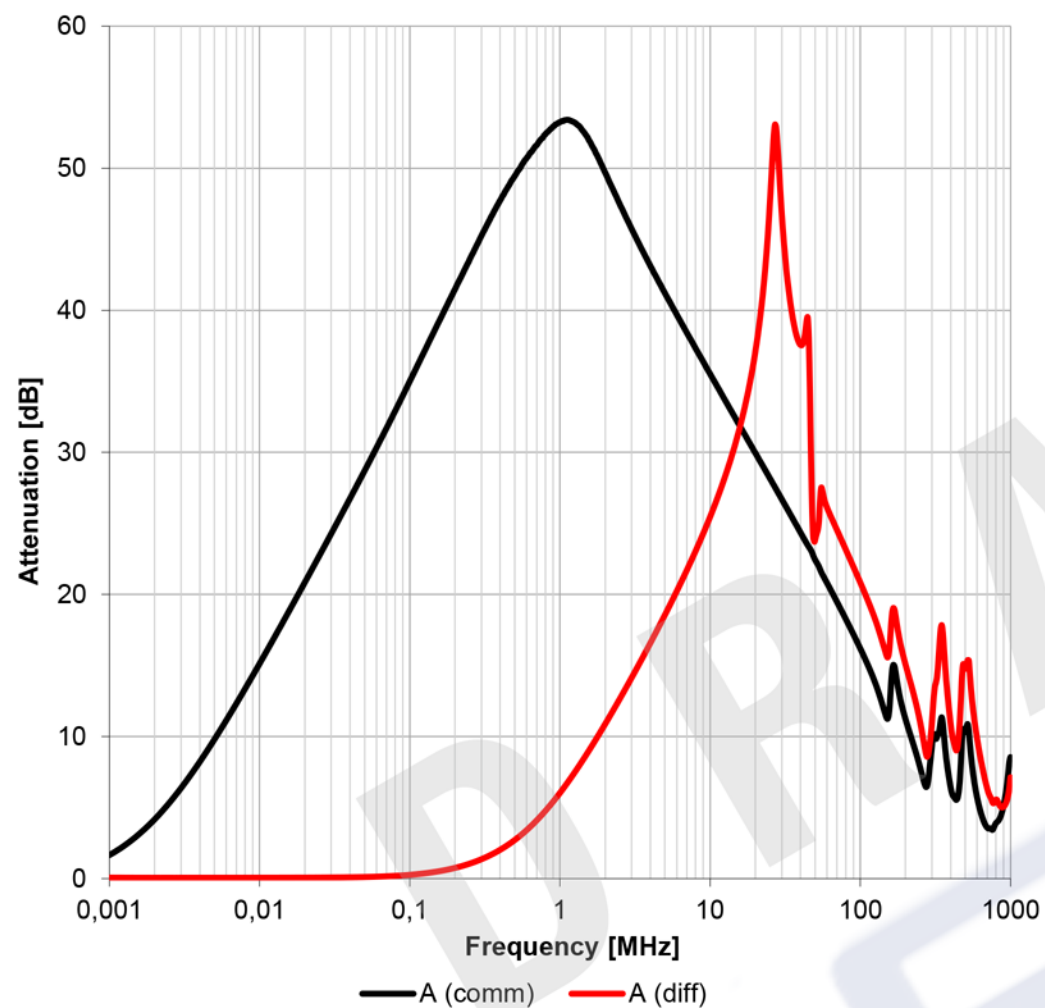
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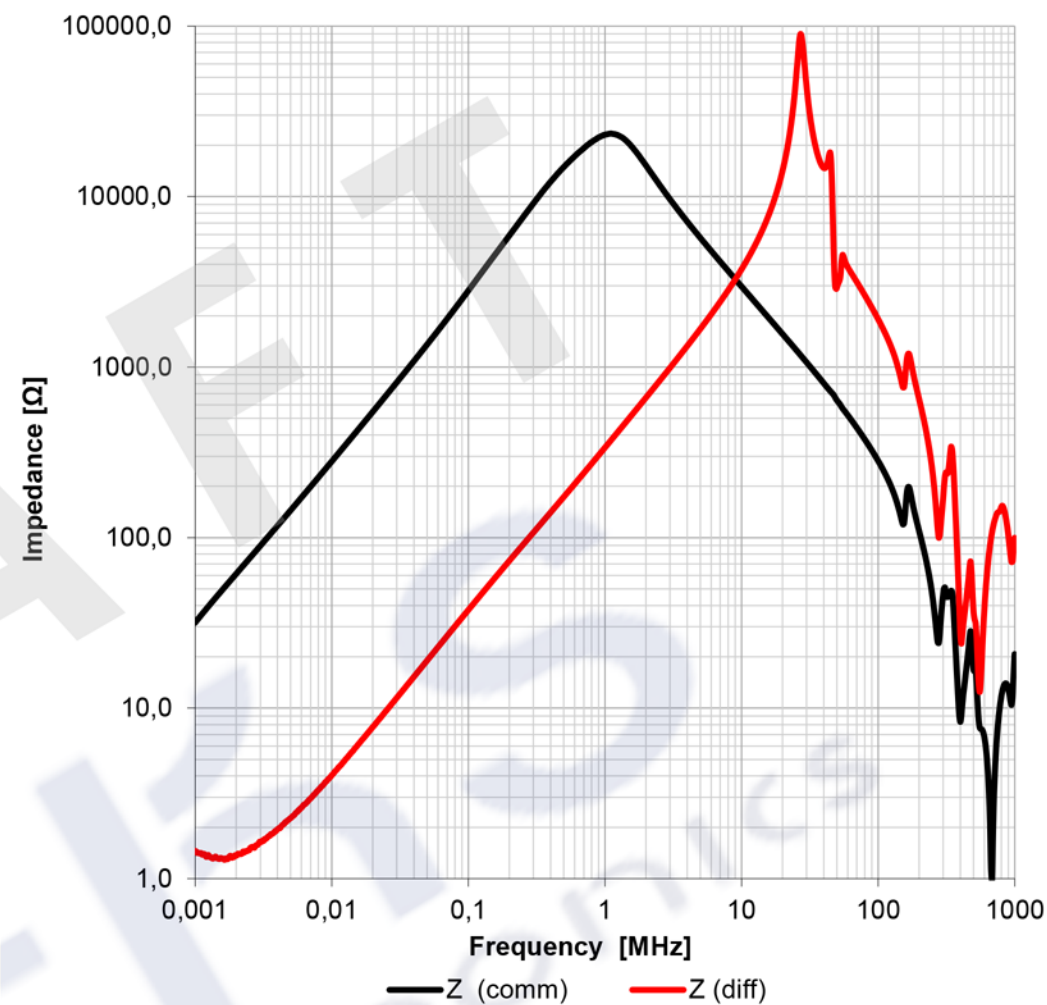
Shaanxi FKS Electronic Parts Import&Export Co.,Ltd.  
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Xixian New Area, Xianyang City, Shaanxi Province, China.  
Tel: 0086 29 8868 5333 Fax: 0086 29 8868 0913  
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|                                                    |                                      |                                            |
|----------------------------------------------------|--------------------------------------|--------------------------------------------|
| DATE (YYYY-MM-DD)<br>2019-11-01                    | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION METHOD<br>                      |
| DESCRIPTION<br><b>Common Mode Power Line Choke</b> |                                      | ORDER CODE<br>FKS7448640411                |
| SIZE/TYPE<br>UT20V                                 |                                      | STATUS<br>Valid from 2019-11-01 due to PCN |

## Typical Insertion Loss:



## Typical Impedance Characteristics:



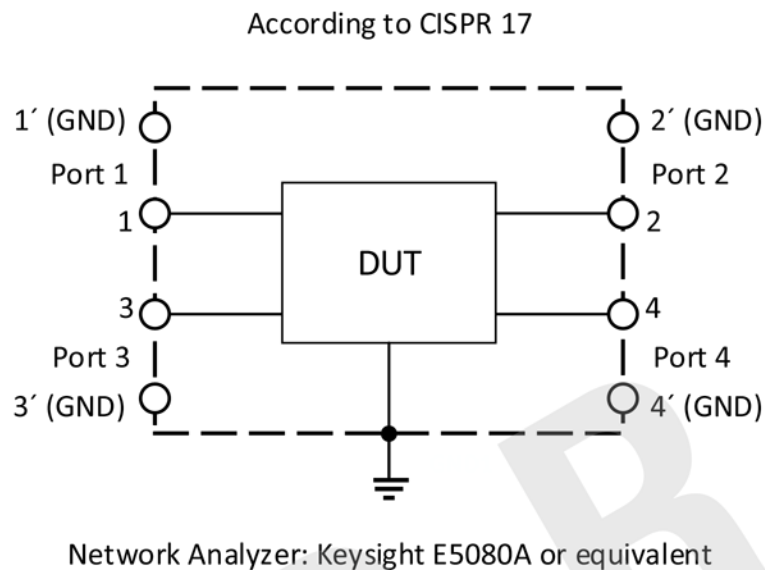
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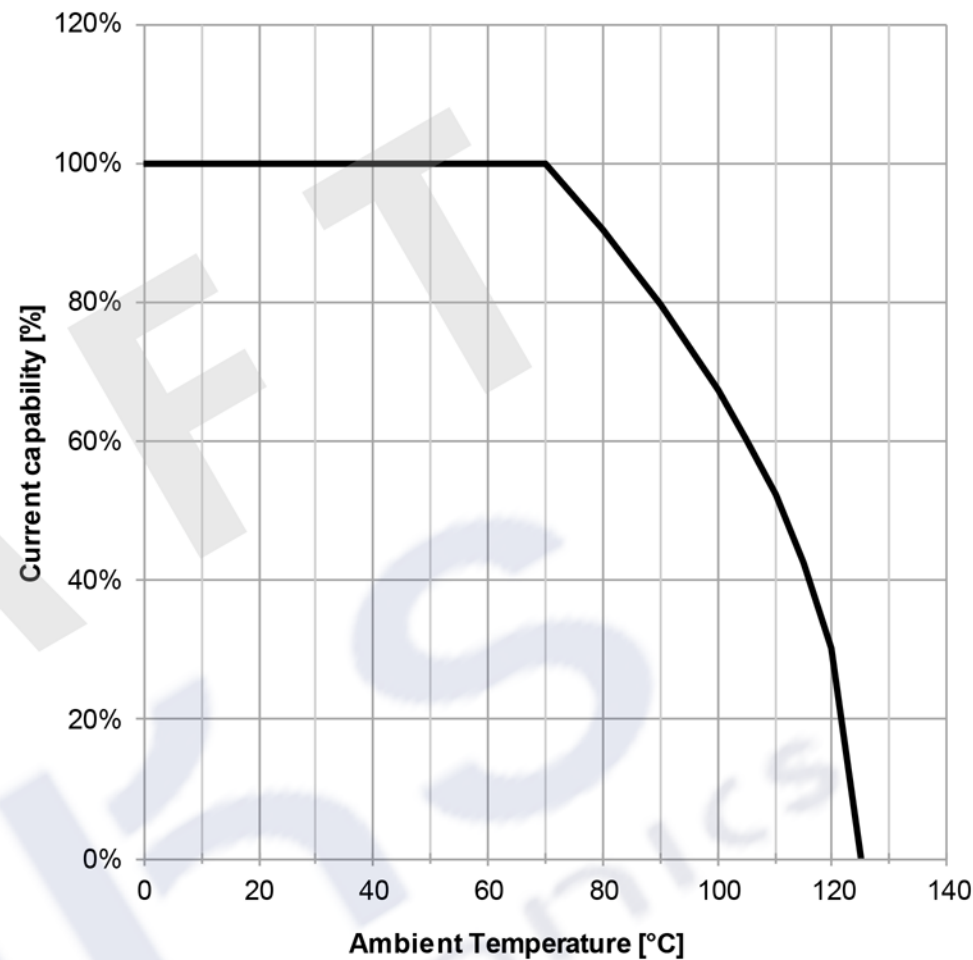
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|                                                            |  |                                                |                                      |                                                                                                               |
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| DESCRIPTION<br><br><b>Common Mode Power Line<br/>Choke</b> |  |                                                |                                      | ORDER CODE<br><br>FKS7448640411                                                                               |
| SIZE/TYPE<br><br>UT20V                                     |  | STATUS<br><br>Valid from 2019-11-01 due to PCN |                                      |                                                                                                               |

Test Setup:

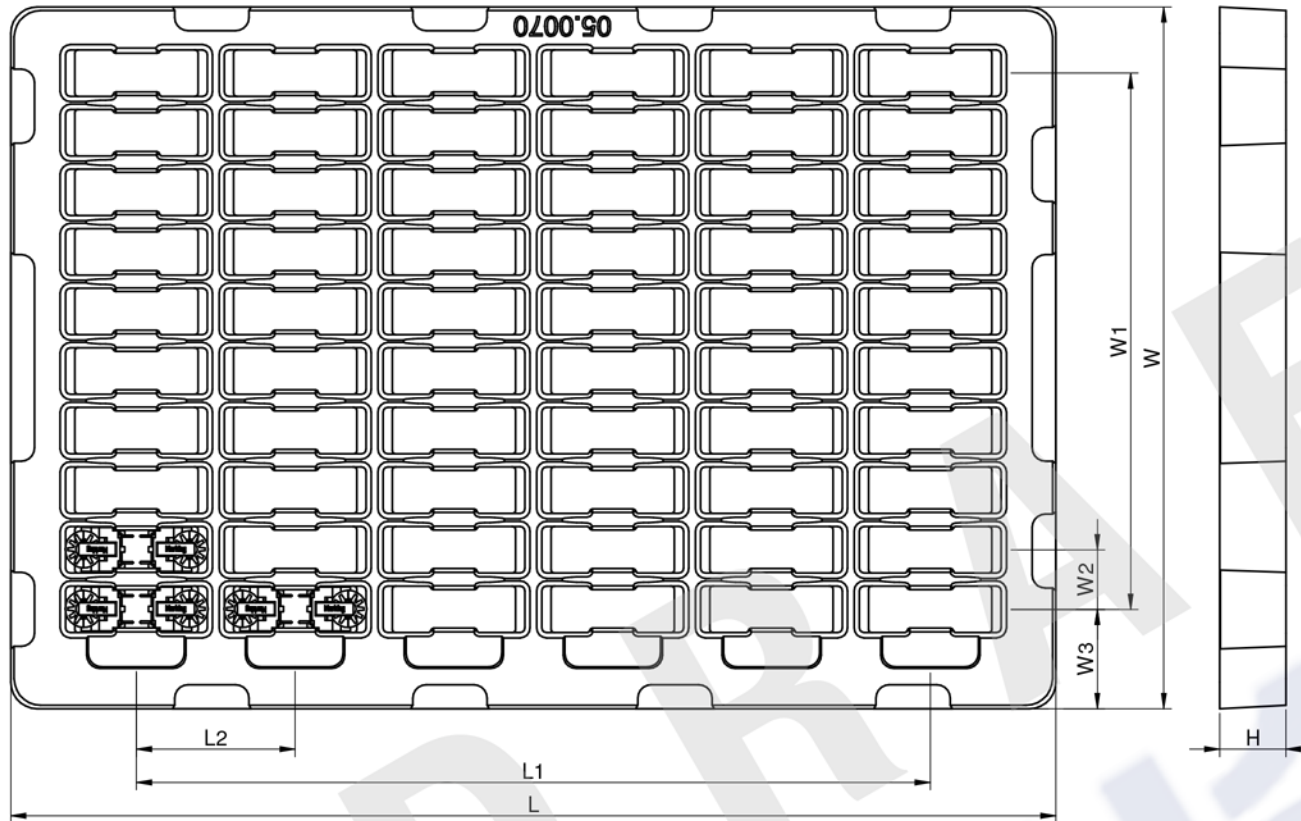


Derating Curve:

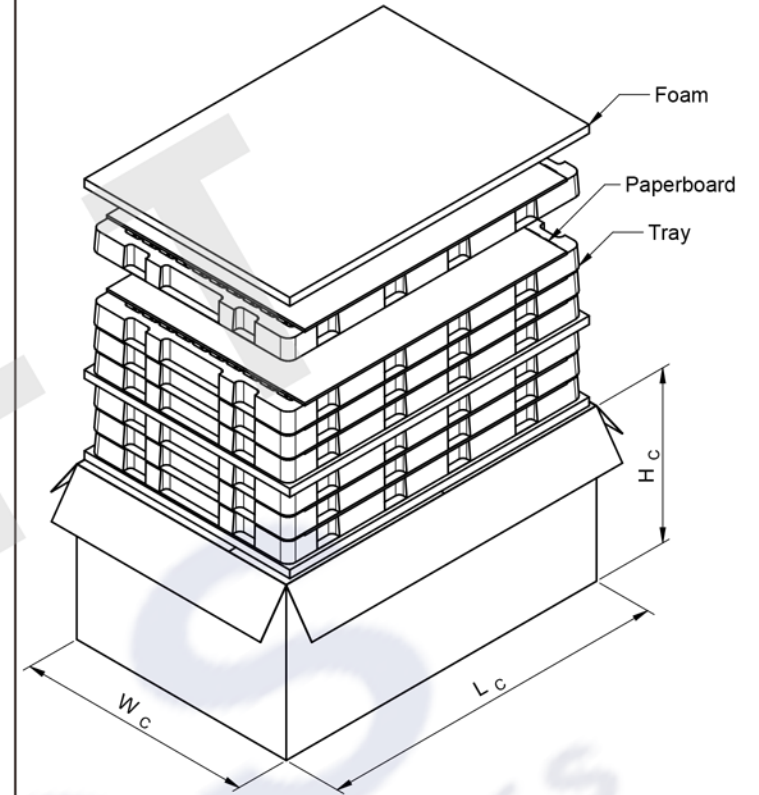


|                                                                                                                                                                                                                                                                                                                                                                                                                          |  |                                                    |                                      |                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------|--------------------------------------|--------------------------------------------|
| <div><div><div><div></div><div>RoHS COMPLIANT</div></div><div><div></div><div>REACH COMPLIANT</div></div><div><div></div><div>AEC Q200</div><div>125 °C GRADE 1</div></div></div></div>                                                                                                                                                                                                                                  |  | DATE (YYYY-MM-DD)<br>2019-11-01                    | GENERAL TOLERANCE<br>DIN ISO 2768-1m | PROJECTION METHOD<br>                      |
| <div><div><div><div></div><div>FKS Electronics</div></div><div></div><div><div>Shaanxi FKS Electronic Parts Import&amp;Export Co.,Ltd.</div><div>Address:Building B1,The West Cloud Valley, Fengxi New City, Xixian New Area,Xianyang City,Shaanxi Province,China.</div><div>Tel:0086 29 8868 5333 Fax:0086 29 8868 0913</div><div><a href="http://www.fks-tech.com">Http://www.fks-tech.com</a></div></div></div></div> |  | DESCRIPTION<br><b>Common Mode Power Line Choke</b> |                                      | ORDER CODE<br>FKS7448640411                |
| SIZE/TYPE<br>UT20V                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                    |                                      | STATUS<br>Valid from 2019-11-01 due to PCN |

## Packaging Specification - Tray and Carton: [mm]



| L (mm) | L1 (mm) | L2 (mm) | W (mm) | W1 (mm) | W2 (mm) | W3 (mm) | H (mm) | Qty. (pcs.) | Material |
|--------|---------|---------|--------|---------|---------|---------|--------|-------------|----------|
| typ.   | typ.    | typ.    | typ.   | typ.    | typ.    | typ.    | typ.   |             |          |
| 395,00 | 300,00  | 60,00   | 265,00 | 206,00  | 22,90   | 37,50   | 23,00  | 120         | PS       |



| L <sub>c</sub> (mm) | W <sub>c</sub> (mm) | H <sub>c</sub> (mm) | No. of Tray | No. of Paperboard | No. of Foam | Qty. (mm) | Material |
|---------------------|---------------------|---------------------|-------------|-------------------|-------------|-----------|----------|
| typ.                | typ.                | typ.                | pcs.        | pcs.              | pcs.        | pcs.      |          |
| 415,00              | 280,00              | 203,00              | 7           | 14                | 3           | 840       | Paper    |



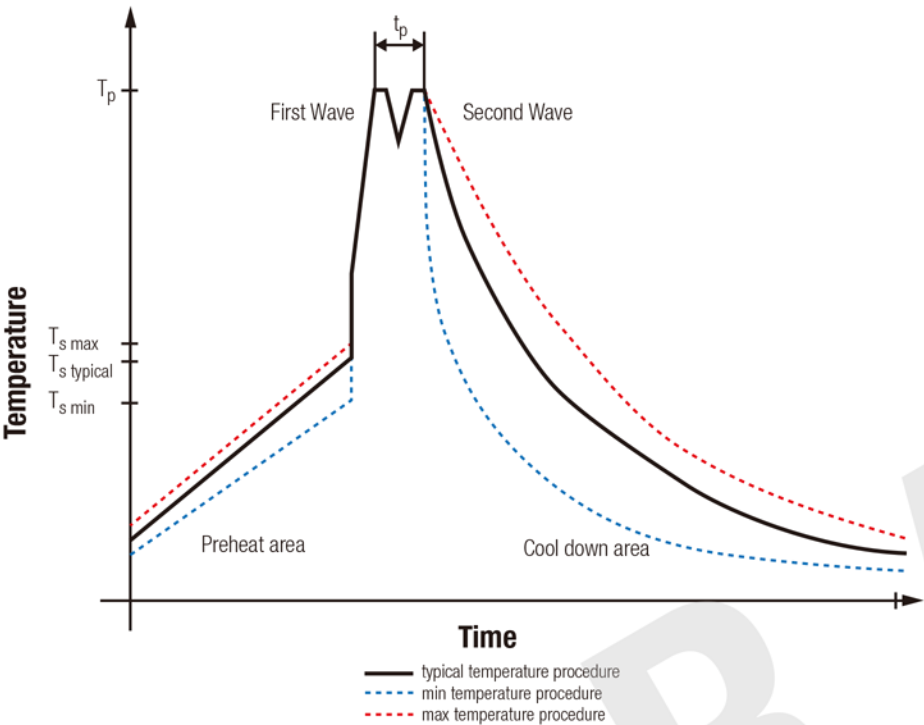
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|                                                    |  |                                            |                                      |                       |
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| DESCRIPTION<br><b>Common Mode Power Line Choke</b> |  | ORDER CODE<br><b>FKS7448640411</b>         |                                      |                       |
| SIZE/TYPE<br>UT20V                                 |  | STATUS<br>Valid from 2019-11-01 due to PCN |                                      |                       |

Classification Wave Soldering Profile:



Classification Wave Soldering Profile:

| Profile Feature                                      |                  | Pb-Free Assembly                            | Sn-Pb Assembly                              |
|------------------------------------------------------|------------------|---------------------------------------------|---------------------------------------------|
| Preheat Temperature Min                              | $T_{s\ min}$     | 100 °C                                      | 100 °C                                      |
| Preheat Temperature Typical                          | $T_{s\ typical}$ | 120 °C                                      | 120 °C                                      |
| Preheat Temperature Max                              | $T_{s\ max}$     | 130 °C                                      | 130 °C                                      |
| Preheat Time $t_s$ from $T_{s\ min}$ to $T_{s\ max}$ | $t_s$            | 70 seconds                                  | 70 seconds                                  |
| Ramp-up Rate                                         | $\Delta T$       | 150 °C max.                                 | 150 °C max.                                 |
| Peak Temperature                                     | $T_p$            | 250 °C - 260 °C                             | 235 °C - 260 °C                             |
| Time of actual peak temperature                      | $t_p$            | max. 10 seconds<br>max. 5 seconds each wave | max. 10 seconds<br>max. 5 seconds each wave |
| Ramp-down Rate, Min                                  |                  | ~ 2 K/ second                               | ~ 2 K/ second                               |
| Ramp-down Rate, Typical                              |                  | ~ 3.5 K/ second                             | ~ 3.5 K/ second                             |
| Ramp-down Rate, Max                                  |                  | ~ 5 K/ second                               | ~ 5 K/ second                               |
| Time 25 °C to 25 °C                                  |                  | 4 minutes                                   | 4 minutes                                   |

refer to EN61760-1:2006

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                            |  |                                      |  |                                                                                                            |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------|--|--------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| <div><div><div>RoHS<br/>COMPLIANT</div></div><div><div>REACH<br/>COMPLIANT</div></div><div><div>AEC<br/>Q200<br/>125 °C<br/>GRADE 1</div></div></div>                                                                                                                                                                   |  | DATE (YYYY-MM-DD)<br>2019-11-01                            |  | GENERAL TOLERANCE<br>DIN ISO 2768-1m |  | PROJECTION METHOD<br> |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | SIZE/TYPE<br>UT20V                                         |  |                                      |  | STATUS<br>Valid from 2019-11-01 due to PCN                                                                 |  |