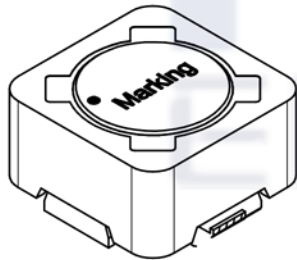
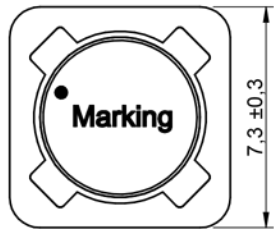
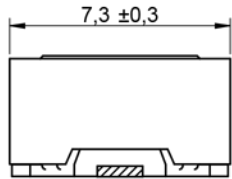
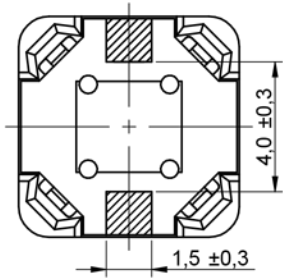
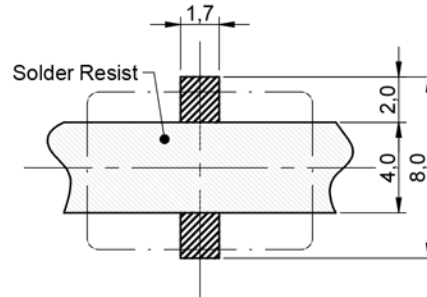


Dimensions: [mm]



Scale - 4:1

Recommended Land Pattern: [mm]



No vias and traces in restricted area

Scale - 3:1

Schematic:



Electrical Properties:

| Properties | | Test conditions | Value | Unit | Tol. |
|-------------------------|------------------|-----------------|-------|------|------|
| Inductance | L | 100 kHz/ 250 mV | 470 | µH | ±20% |
| Rated Current | I _R | ΔT = 40 K | 0.35 | A | max. |
| Saturation Current | I _{SAT} | ΔL/L < 10 % | 0.38 | A | typ. |
| DC Resistance | R _{DC} | @ 20 °C | 2270 | mΩ | typ. |
| DC Resistance | R _{DC} | @ 20 °C | 2720 | mΩ | max. |
| Self Resonant Frequency | f _{res} | | 2.9 | MHz | typ. |

Certification:

| | |
|----------------|---------------------------------------|
| RoHS Approval | Compliant [2011/65/EU&2015/863] |
| REACH Approval | Conform or declared [(EC)1907/2006] |
| Halogen Free | Conform [JEDEC JS709B] |
| Halogen Free | Conform [IEC 61249-2-21] |

General Properties:

| | |
|---|---------------------|
| It is recommended that the temperature of the component does not exceed +125 °C under worst case conditions | |
| Ambient Temperature (referring to I _n) | -40 up to +85 °C |
| Operating Temperature | -40 up to +125 °C |
| Storage Conditions (in original packaging) | < 40 °C ; < 75 % RH |
| Moisture Sensitivity Level (MSL) | 1 |
| Test conditions of Electrical Properties: +20 °C, 33 % RH if not specified differently | |
| Coplanarity of the terminal pads: 120 µm | |

Product Marking:

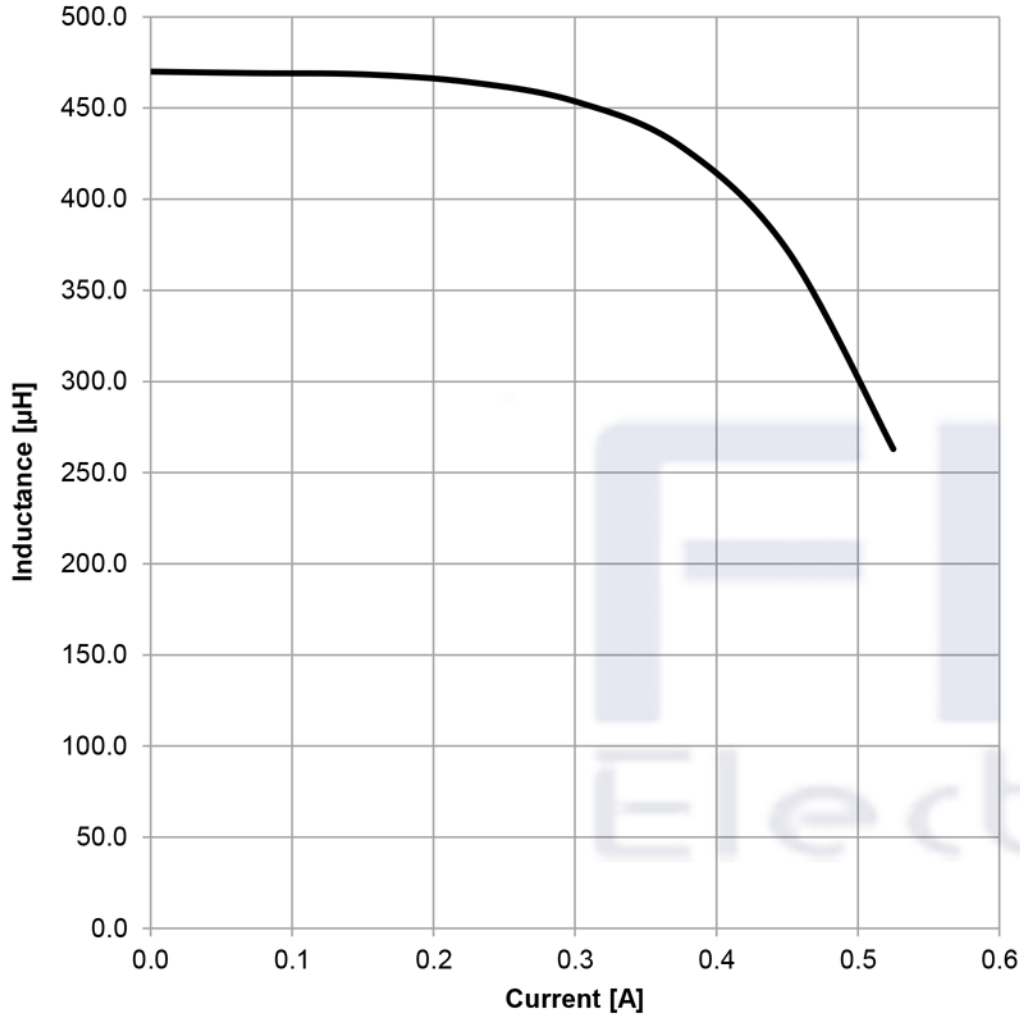
| | |
|------------------|------------------------|
| Start of Winding | • |
| Marking | *471 (Inductance Code) |



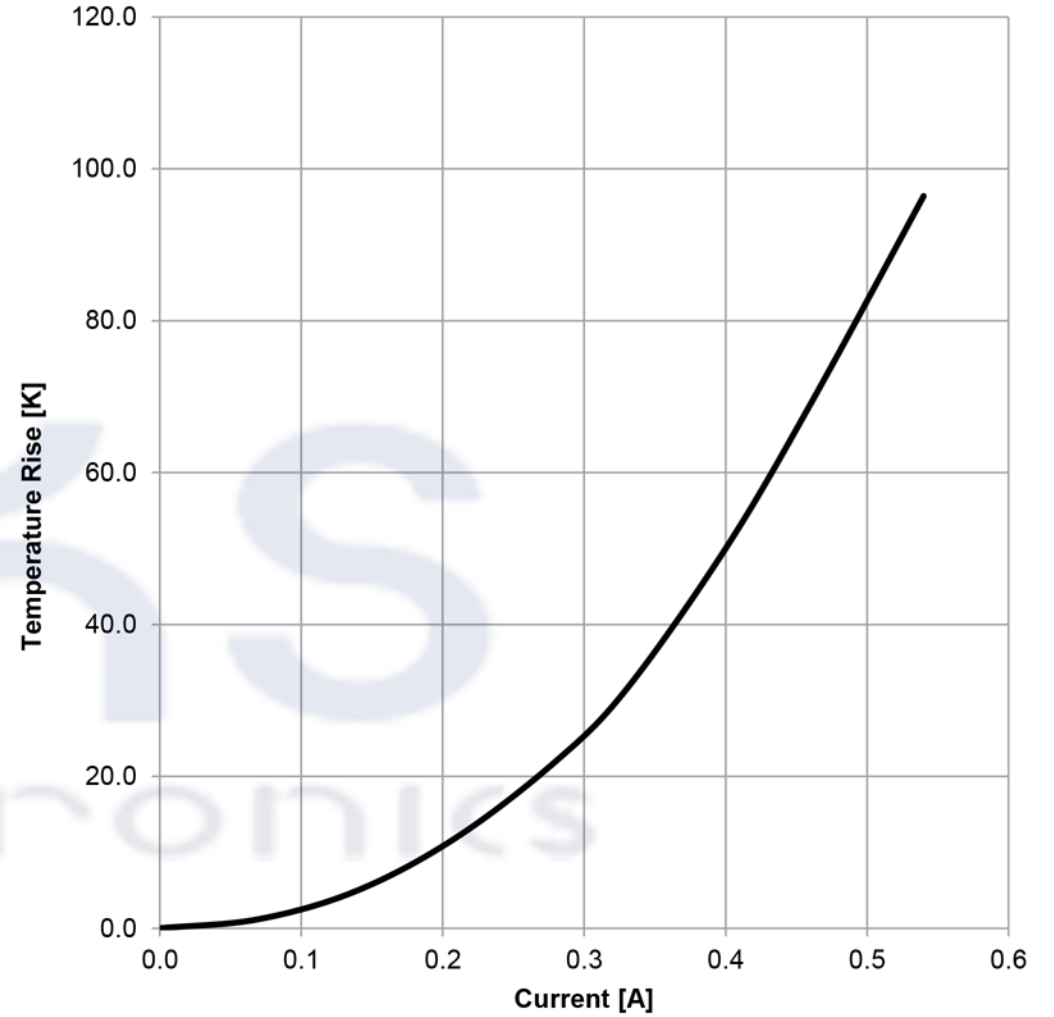
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 Xixian New Area, Xianyang City, Shaanxi Province, China.
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| | | | | | |
|-------------------|------------|-------------------|------------------------------------|-------------------|--|
| DATE (YYYY-MM-DD) | 2019-02-15 | GENERAL TOLERANCE | DIN ISO 2768-1m | PROJECTION METHOD | |
| DESCRIPTION | | | WE-PDA SMT Shielded Power Inductor | | |
| ORDER CODE | | | FKS784777471 | | |
| SIZE/TYPE | 7345 | STATUS | Valid | | |

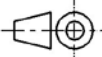
Typical Inductance vs. Current Characteristics:



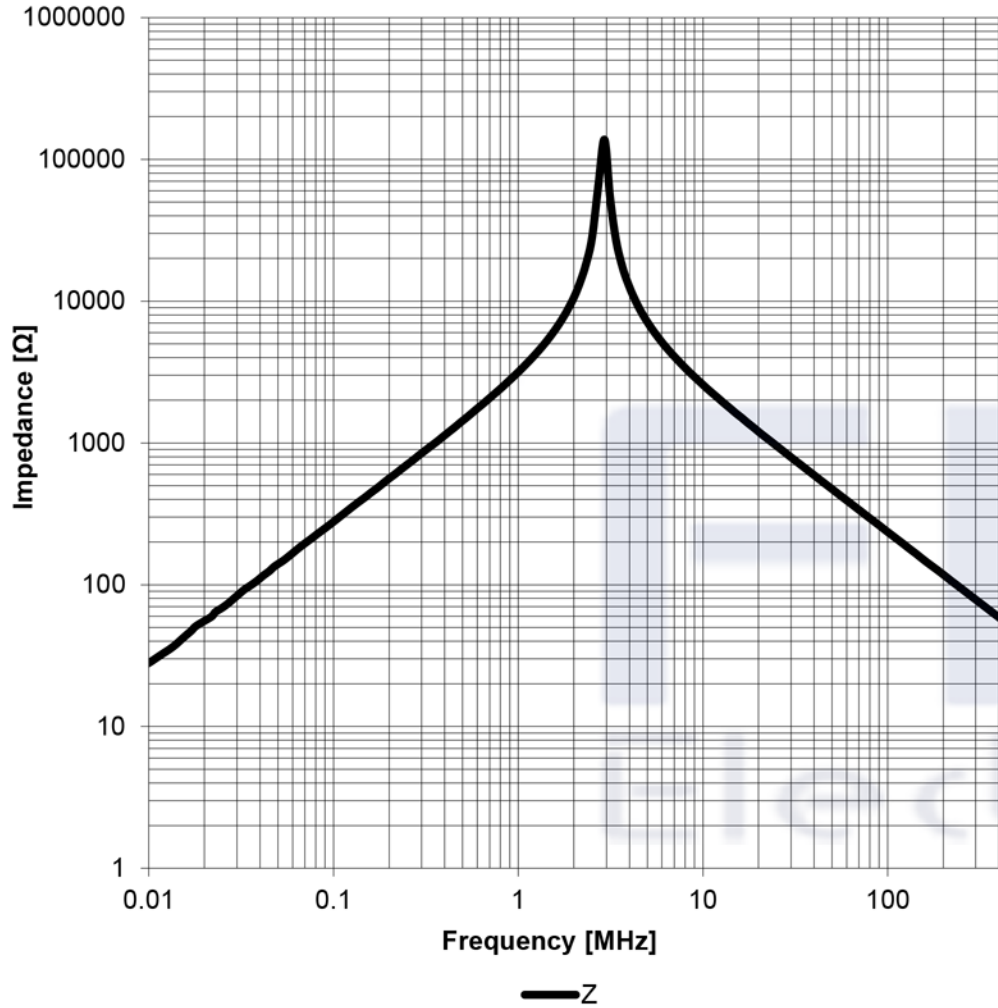
Typical Temperature Rise vs. Current Characteristics:










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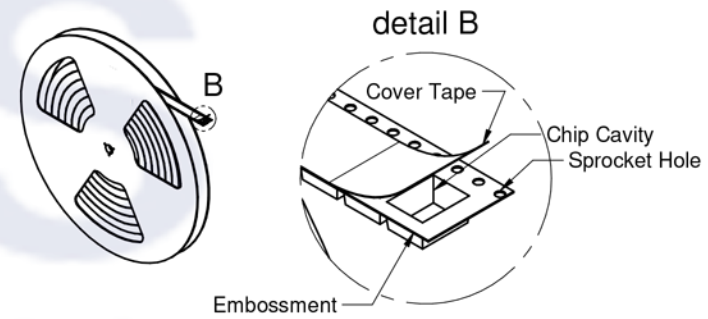
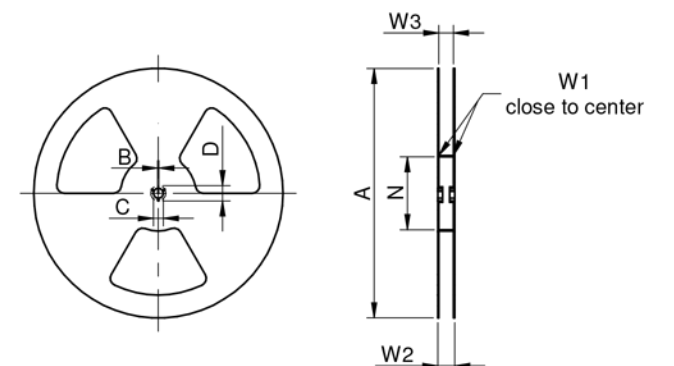
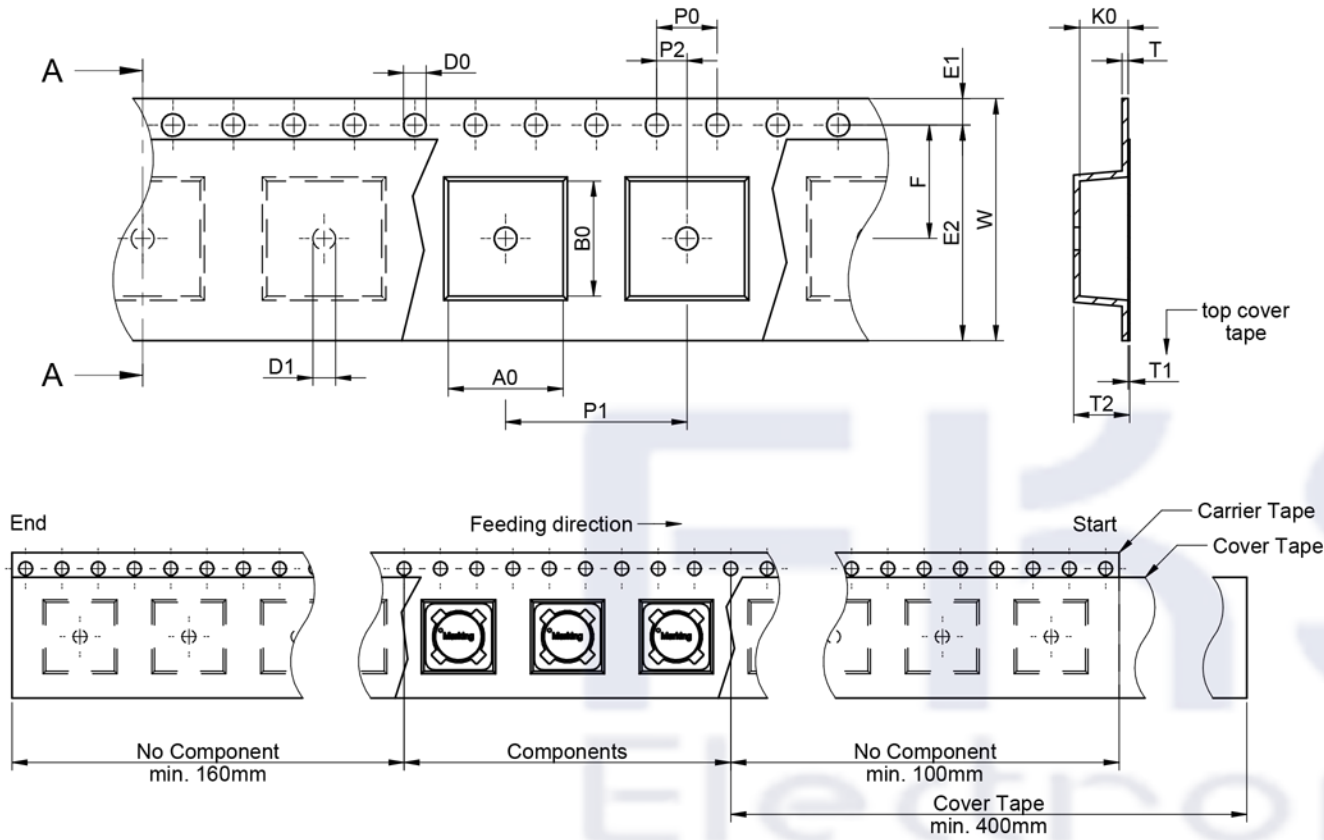
| | | | |
|---|---------------------------------|--------------------------------------|--|
| | DATE (YYYY-MM-DD) 2019-02-15 | GENERAL TOLERANCE DIN ISO 2768-1m | PROJECTION METHOD  |
| DESCRIPTION SMT Shielded Power Inductor | | ORDER CODE FKS784777471 | |
| SIZE/TYPE 7345 | | STATUS Valid | |

Typical Impedance Characteristics:



| | | | | |
|--|---|---|--------------------------------------|--|
|     | | DATE (YYYY-MM-DD) 2019-02-15 | GENERAL TOLERANCE DIN ISO 2768-1m | PROJECTION METHOD  |
|   | Shaanxi FKS Electronic Parts Import&Export Co.,Ltd. Address:Building B1,The West Cloud Valley, Fengxi New City, Xixian New Area,Xianyang City,Shaanxi Province,China. Tel:0086 29 8868 5333 Fax:0086 29 8868 0913 Http://www.fks-tech.com | DESCRIPTION SMT Shielded Power Inductor | | ORDER CODE FKS784777471 STATUS Valid |
| | | SIZE/TYPE 7345 | | |

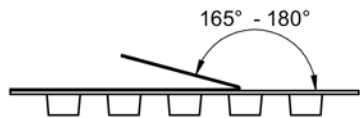
Packaging Specification - Tape and Reel: [mm]



packaging is referred to the international standard IEC 60286-3:2013

| | A0 | B0 | W | T | T1 | T2 | K0 | P0 | P1 | P2 | D0 | D1 | E1 | E2 | F | Tape Type 2a | VPE / packaging unit |
|-----------|------|------|-----------|------|------|------|------|------|------|------|-----------|------|------|-------|------|--------------|----------------------|
| tolerance | typ. | typ. | +0.3/-0.1 | max. | max. | typ. | typ. | ±0.1 | ±0.1 | ±0.1 | +0.1/-0.0 | min. | ±0.1 | min. | ±0.1 | | pcs. |
| size | 7345 | 7.6 | 7.6 | 16.0 | 0.6 | 0.1 | 4.7 | 4.3 | 4.0 | 12.0 | 2.0 | 1.5 | 1.75 | 14.25 | 7.5 | Polystyrene | 1000 |

| | A | B | C | D | N | W1 | W2 | W3 | W3 |
|------------|-------|--------|------|-------|-------|-------|-------|-------|-------------|
| tolerance | ± 2.0 | min. | min. | min. | min. | + 2 | max. | min. | max. |
| Tape width | 16 mm | 330.00 | 1.50 | 12.80 | 20.20 | 60.00 | 16.40 | 22.40 | 15.90 19.40 |



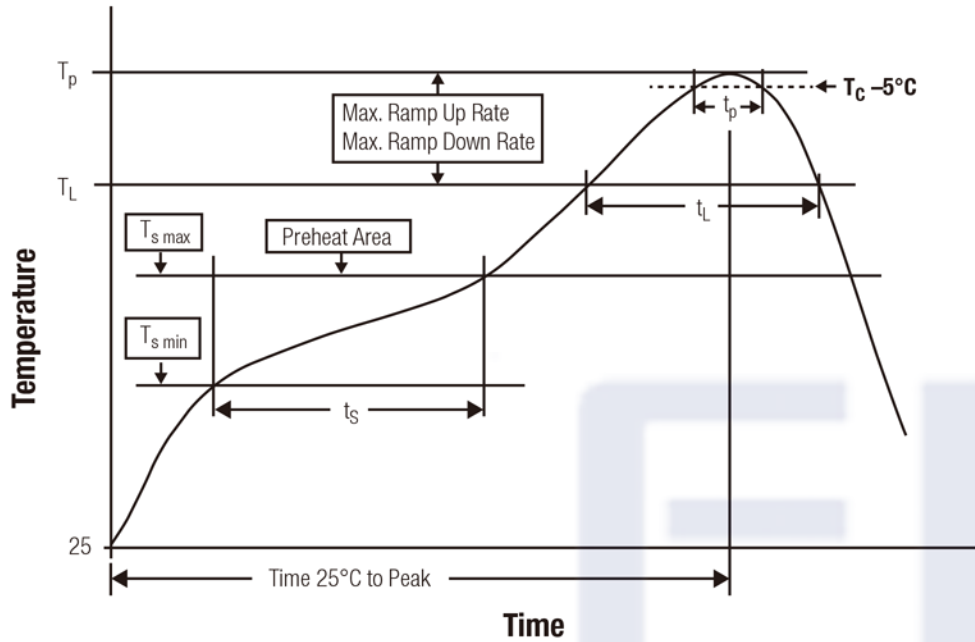
| | Pull-of force |
|------------|---------------------|
| Tape width | 16 mm 0,1 N - 1,3 N |



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| DESCRIPTION | | DATE (YYYY-MM-DD) | GENERAL TOLERANCE | PROJECTION METHOD |
|------------------------------------|------|-------------------|-------------------|---------------------|
| SMT Shielded Power Inductor | | 2019-02-15 | DIN ISO 2768-1m | |
| | | ORDER CODE | | FKS784777471 |
| SIZE/TYPE | 7345 | STATUS | | Valid |

Classification Reflow Profile for SMT components:



Classification Reflow Soldering Profile:

| Profile Feature | | Value |
|--|--------------|-------------------|
| Preheat Temperature Min | $T_{s \min}$ | 150 °C |
| Preheat Temperature Max | $T_{s \max}$ | 200 °C |
| Preheat Time t_s from $T_{s \min}$ to $T_{s \max}$ | t_s | 60 - 120 seconds |
| Ramp-up Rate (T_L to T_p) | | 3 °C/ second max. |
| Liquidous Temperature | T_L | 217 °C |
| Time t_L maintained above T_L | t_L | 60 - 150 seconds |
| Peak package body temperature | T_p | see table below |
| Time within 5°C of actual peak temperature | t_p | 20 - 30 seconds |
| Ramp-down Rate (T_L to T_p) | | 6 °C/ second max. |
| Time 25°C to peak temperature | | 8 minutes max. |

refer to IPC/ JEDEC J-STD-020E

Package Classification Reflow Temperature:

| Properties | Volume mm ³ <350 | Volume mm ³ 350-2000 | Volume mm ³ >2000 |
|--|--------------------------------|------------------------------------|---------------------------------|
| PB-Free Assembly Package Thickness < 1.6 mm | 260 °C | 260 °C | 260 °C |
| PB-Free Assembly Package Thickness 1.6 mm - 2.5 mm | 260 °C | 250 °C | 245 °C |
| PB-Free Assembly Package Thickness ≥ 2.5 mm | 250 °C | 245 °C | 245 °C |
| Sn-PB Assembly Package Thickness < 2.5 mm | 235 °C | 220 °C | |
| Sn-PB Assembly Package Thickness ≥ 2.5 mm | 220 °C | 220 °C | |

refer to IPC/ JEDEC J-STD-020E

| | | | |
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