



SEA & LAND ELECTRONIC CORP.

www.sealand-pptc.com

ALPHA-TOP TECHNOLOGY CORP.

www.alpha-top.cn

APPROVAL SHEET

MODEL NO.: SL0420~1265-SERIES

CUSTOMER:

CUSTOMER'S APPROVAL:

AUTHORIZED SIGNATURE/STAMP:

DATE

MANUFACTURER:

HEAD OFFICE:

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Submitted by:

Chen

Approved by:

YC Lin

DATE:

25-Mar-24

SPECIFICATION

**RoHS
COMPLIANT**

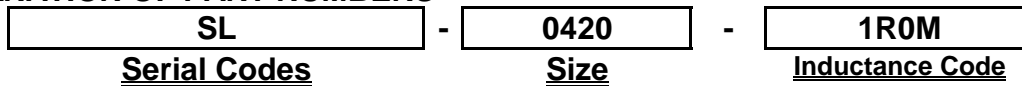
| | |
|-----------------|---------------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 0420 | Dimensions |
|------|------------|
| A | 4.1 ± 0.5 |
| B | 4.5 ± 0.5 |
| C | 2.0 MAX |
| D | 2.0 ± 0.5 |
| E | 1.0 ± 0.5 |
| F | 4.95 Typ |
| G | 2.15 Typ |
| H | 2.30 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|----------------------------------|-----------------------------------|
| | | [Max] | I _{dc} (AMP) Typical | I _{sat} (AMP) Typical |
| SL0420-R22M | 0.22 | 6.5 | 9.5 | 17.0 |
| SL0420-R47M | 0.47 | 12 | 7.5 | 13.0 |
| SL0420-R56M | 0.56 | 16 | 7.0 | 10.0 |
| SL0420-R68M | 0.68 | 18 | 6.5 | 8.0 |
| SL0420-1R0M | 1.00 | 27 | 6.0 | 7.0 |
| SL0420-1R5M | 1.50 | 45 | 5.0 | 6.5 |
| SL0420-2R2M | 2.20 | 58 | 4.5 | 5.0 |
| SL0420-3R3M | 3.30 | 89 | 3.5 | 4.0 |
| SL0420-4R7M | 4.70 | 105 | 3.0 | 3.5 |
| SL0420-6R8M | 6.80 | 150 | 2.5 | 3.0 |
| SL0420-100M | 10.00 | 200 | 2.0 | 2.5 |

- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause L₀ to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

SPECIFICATION

**RoHS
COMPLIANT**

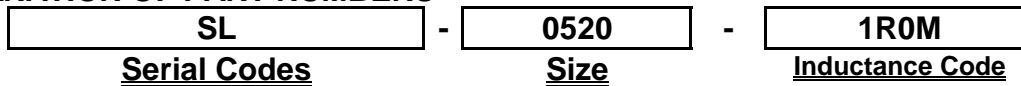
| | |
|-----------------|---------------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 0520 | Dimensions |
|------|------------|
| A | 5.2 ± 0.5 |
| B | 5.7 ± 0.5 |
| C | 2.0 MAX |
| D | 2.0 ± 0.5 |
| E | 1.0 ± 0.5 |
| F | 5.20 Typ |
| G | 2.00 Typ |
| H | 2.50 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|----------------------------------|-----------------------------------|
| | | [Max] | I _{dc} (AMP) Typical | I _{sat} (AMP) Typical |
| SL0520-R22M | 0.22 | 4.5 | 15.0 | 18.5 |
| SL0520-R47M | 0.47 | 9 | 10.5 | 15.5 |
| SL0520-R56M | 0.56 | 10 | 9.5 | 15.0 |
| SL0520-R68M | 0.68 | 13 | 9.0 | 11.5 |
| SL0520-1R0M | 1.00 | 17 | 8.0 | 9.0 |
| SL0520-1R5M | 1.50 | 27 | 7.0 | 8.0 |
| SL0520-2R2M | 2.20 | 34 | 5.0 | 7.0 |
| SL0520-3R3M | 3.30 | 58 | 4.5 | 5.5 |
| SL0520-4R7M | 4.70 | 85 | 3.5 | 4.5 |
| SL0520-6R8M | 6.80 | 120 | 2.8 | 3.5 |
| SL0520-100M | 10.00 | 155 | 2.5 | 3.0 |

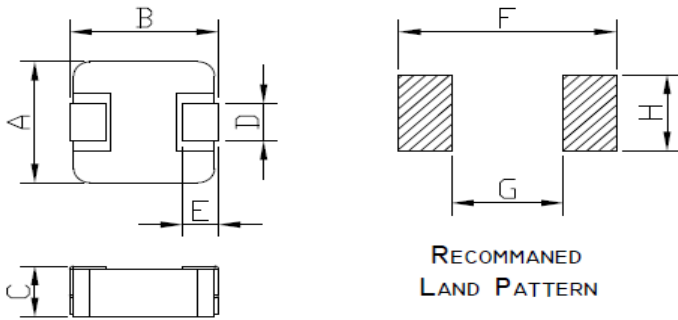
- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause L₀ to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

SPECIFICATION

**RoHS
COMPLIANT**

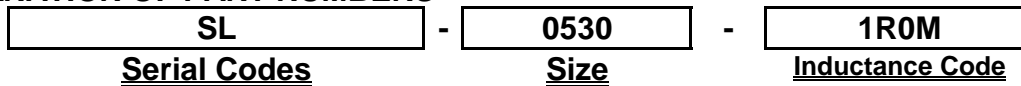
| | |
|-----------------|---------------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 0530 | Dimensions |
|------|------------|
| A | 5.2 ± 0.5 |
| B | 5.7 ± 0.5 |
| C | 3.0 MAX |
| D | 2.0 ± 0.5 |
| E | 1.0 ± 0.5 |
| F | 5.20 Typ |
| G | 2.00 Typ |
| H | 2.50 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|----------------------------------|-----------------------------------|
| | | [Max] | I _{dc} (AMP) Typical | I _{sat} (AMP) Typical |
| SL0530-R22M | 0.22 | 3.9 | 14.0 | 20.0 |
| SL0530-R33M | 0.33 | 5.5 | 13.0 | 18.0 |
| SL0530-R47M | 0.47 | 7.5 | 12.0 | 15.0 |
| SL0530-R68M | 0.68 | 10 | 10.0 | 14.0 |
| SL0530-1R0M | 1.00 | 14 | 9.0 | 13.0 |
| SL0530-1R5M | 1.50 | 25 | 8.0 | 9.5 |
| SL0530-2R2M | 2.20 | 29 | 7.0 | 8.5 |
| SL0530-3R3M | 3.30 | 38 | 5.5 | 7.5 |
| SL0530-4R7M | 4.70 | 55 | 4.5 | 6.0 |
| SL0530-6R8M | 6.80 | 70 | 3.5 | 5.0 |
| SL0530-100M | 10.00 | 115 | 3.0 | 4.0 |
| SL0530-150M | 15.00 | 175 | 2.5 | 3.0 |

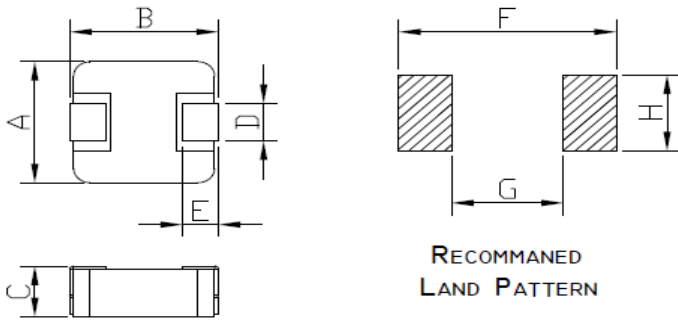
- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause Lo to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

SPECIFICATION

**RoHS
COMPLIANT**

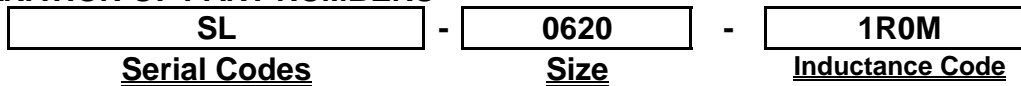
| | |
|-----------------|---------------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 0620 | Dimensions |
|------|------------|
| A | 6.6 ± 0.5 |
| B | 7.1 ± 0.5 |
| C | 2.0 MAX |
| D | 3.0 ± 0.5 |
| E | 1.5 ± 0.5 |
| F | 8.40 Typ |
| G | 3.60 Typ |
| H | 3.50 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|------------------------|-----------------------|
| | | [Max] | Idc (AMP) Typical | Isat (AMP) Typical |
| SL0620-R10M | 0.10 | 2.5 | 25.0 | 42.0 |
| SL0620-R22M | 0.22 | 3.5 | 16.0 | 25.0 |
| SL0620-R33M | 0.33 | 5.5 | 12.0 | 22.0 |
| SL0620-R47M | 0.47 | 8.4 | 11.5 | 18.0 |
| SL0620-R68M | 0.68 | 12 | 9.5 | 17.0 |
| SL0620-1R0M | 1.00 | 16 | 8.5 | 12.5 |
| SL0620-1R5M | 1.50 | 26 | 8.0 | 10.5 |
| SL0620-2R2M | 2.20 | 35 | 7.0 | 8.5 |
| SL0620-3R3M | 3.30 | 50 | 4.5 | 7.0 |
| SL0620-4R7M | 4.70 | 60 | 4.0 | 5.5 |
| SL0620-6R8M | 6.80 | 95 | 3.0 | 5.0 |
| SL0620-100M | 10.00 | 120 | 2.5 | 4.0 |

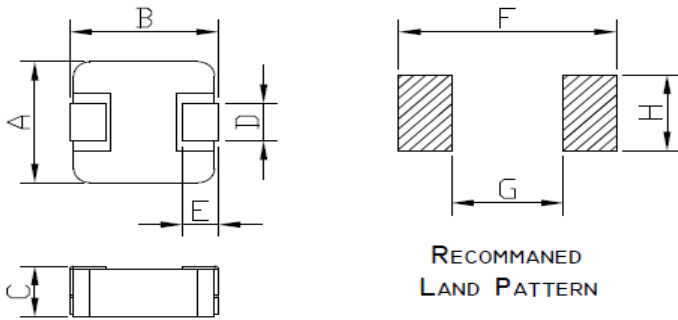
- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause Lo to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

SPECIFICATION

RoHS
COMPLIANT

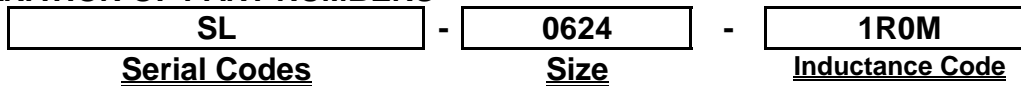
| | |
|----------|--------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 0624 | Dimensions |
|------|------------|
| A | 6.6 ± 0.5 |
| B | 7.1 ± 0.5 |
| C | 2.4 MAX |
| D | 3.0 ± 0.5 |
| E | 1.5 ± 0.5 |
| F | 8.40 Typ |
| G | 3.60 Typ |
| H | 3.50 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|------------------------|-----------------------|
| | | [Max] | Idc (AMP) Typical | Isat (AMP) Typical |
| SL0624-R10M | 0.10 | 1.85 | 22.5 | 55.0 |
| SL0624-R22M | 0.22 | 3.2 | 21.0 | 33.0 |
| SL0624-R33M | 0.33 | 4.1 | 18.0 | 24.5 |
| SL0624-R47M | 0.47 | 5.1 | 15.0 | 21.0 |
| SL0624-R68M | 0.68 | 7 | 12.0 | 16.5 |
| SL0624-1R0M | 1.00 | 13.5 | 9.0 | 15.0 |
| SL0624-1R5M | 1.50 | 17.5 | 8.0 | 13.5 |
| SL0624-2R2M | 2.20 | 28 | 7.0 | 9.0 |
| SL0624-3R3M | 3.30 | 39 | 5.5 | 7.0 |
| SL0624-4R7M | 4.70 | 50 | 5.0 | 6.5 |
| SL0624-6R8M | 6.80 | 70 | 4.0 | 5.0 |
| SL0624-100M | 10.00 | 100 | 3.0 | 4.0 |
| SL0624-150M | 15.00 | 160 | 2.5 | 3.5 |
| SL0624-220M | 22.00 | 230 | 2.0 | 2.5 |

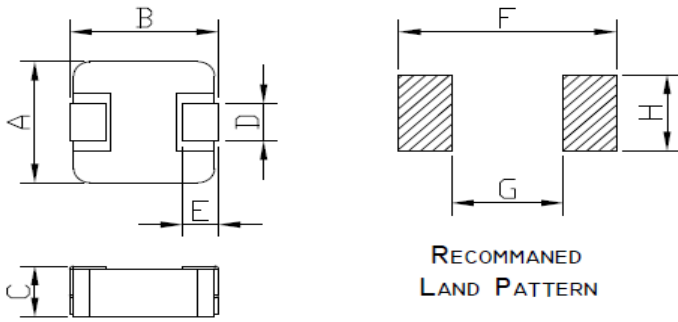
- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause Lo to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

SPECIFICATION

**RoHS
COMPLIANT**

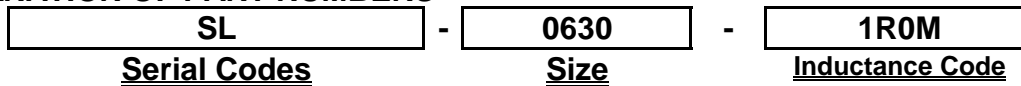
| | |
|-----------------|---------------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 0630 | Dimensions |
|------|------------|
| A | 6.6 ± 0.5 |
| B | 7.1 ± 0.5 |
| C | 3.0 MAX |
| D | 3.0 ± 0.5 |
| E | 1.5 ± 0.5 |
| F | 8.40 Typ |
| G | 3.60 Typ |
| H | 3.50 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|----------------------|-----------------------|
| | | [Max] | Idc (AMP) Typical | Isat (AMP) Typical |
| SL0630-R33M | 0.33 | 3.5 | 21.0 | 25.0 |
| SL0630-R47M | 0.47 | 4.5 | 18.0 | 20.0 |
| SL0630-R56M | 0.56 | 5 | 16.5 | 18.0 |
| SL0630-R68M | 0.68 | 5.8 | 16.0 | 17.0 |
| SL0630-R82M | 0.82 | 6 | 14.0 | 16.0 |
| SL0630-1R0M | 1.00 | 9.2 | 12.0 | 15.0 |
| SL0630-1R5M | 1.50 | 12.1 | 11.0 | 13.0 |
| SL0630-2R2M | 2.20 | 19.5 | 9.0 | 10.0 |
| SL0630-3R3M | 3.30 | 26 | 8.5 | 9.5 |
| SL0630-4R7M | 4.70 | 38 | 6.5 | 8.0 |
| SL0630-6R8M | 6.80 | 65 | 5.5 | 6.5 |
| SL0630-100M | 10.00 | 99.5 | 5.0 | 5.5 |
| SL0630-150M | 15.00 | 115 | 3.5 | 4.5 |
| SL0630-220M | 22.00 | 155 | 2.5 | 3.5 |
| SL0630-330M | 33.00 | 250 | 2.0 | 2.5 |
| SL0630-470M | 47.00 | 415 | 1.5 | 2.0 |

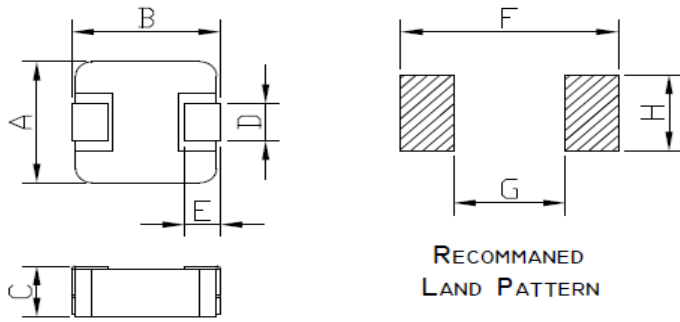
- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause Lo to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

SPECIFICATION

RoHS
COMPLIANT

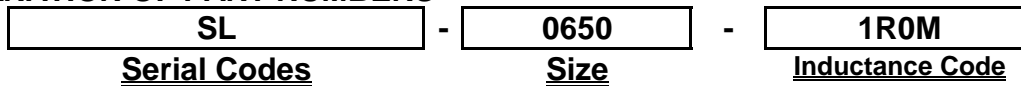
| | |
|----------|--------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 0650 | Dimensions |
|------|------------|
| A | 6.6 ± 0.5 |
| B | 7.1 ± 0.5 |
| C | 5.0 MAX |
| D | 3.0 ± 0.5 |
| E | 1.5 ± 0.5 |
| F | 8.40 Typ |
| G | 3.60 Typ |
| H | 3.50 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|------------------------|-----------------------|
| | | [Max] | Idc (AMP) Typical | Isat (AMP) Typical |
| SL0650-R22M | 0.22 | 1.5 | 30.0 | 35.0 |
| SL0650-R47M | 0.47 | 5 | 20.0 | 24.0 |
| SL0650-R56M | 0.56 | 5.5 | 18.0 | 22.0 |
| SL0650-R68M | 0.68 | 6.5 | 14.0 | 18.0 |
| SL0650-1R0M | 1.00 | 8 | 12.0 | 16.0 |
| SL0650-1R5M | 1.50 | 10.5 | 9.5 | 13.0 |
| SL0650-2R2M | 2.20 | 12.5 | 9.0 | 12.0 |
| SL0650-3R3M | 3.30 | 22.5 | 8.5 | 10.0 |
| SL0650-4R7M | 4.70 | 27.5 | 7.0 | 9.0 |
| SL0650-6R8M | 6.80 | 35 | 6.0 | 8.0 |
| SL0650-100M | 10.00 | 58 | 5.0 | 7.0 |
| SL0650-150M | 15.00 | 65 | 4.0 | 5.0 |
| SL0650-220M | 22.00 | 98 | 3.0 | 5.0 |
| SL0650-330M | 33.00 | 186 | 2.5 | 3.5 |
| SL0650-470M | 47.00 | 255 | 2.0 | 2.5 |

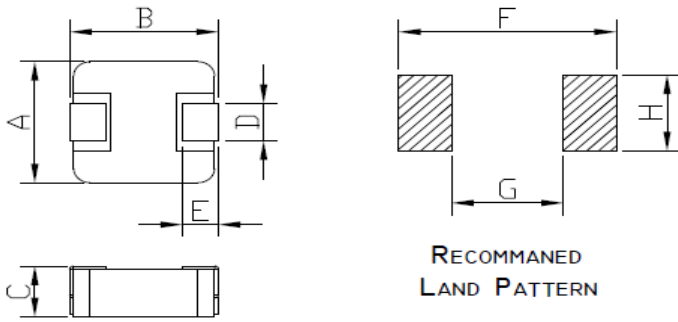
- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause Lo to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

SPECIFICATION

RoHS
COMPLIANT

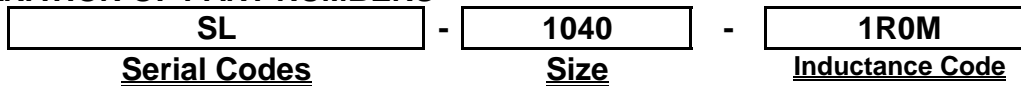
| | |
|----------|--------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 1040 | Dimensions |
|------|------------|
| A | 10.5 ± 0.5 |
| B | 11.0 ± 0.5 |
| C | 4.0 MAX |
| D | 3.0 ± 0.5 |
| E | 2.0 ± 0.5 |
| F | 12.5 Typ |
| G | 6.00 Typ |
| H | 4.00 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|------------------------|-----------------------|
| | | [Max] | Idc (AMP) Typical | Isat (AMP) Typical |
| SL1040-R47M | 0.47 | 1.7 | 30.0 | 40.0 |
| SL1040-R56M | 0.56 | 1.9 | 25.0 | 33.0 |
| SL1040-R68M | 0.68 | 2.4 | 23.0 | 30.0 |
| SL1040-1R0M | 1.00 | 3.5 | 19.0 | 28.0 |
| SL1040-1R5M | 1.50 | 5 | 16.0 | 24.0 |
| SL1040-2R2M | 2.20 | 7 | 12.0 | 18.0 |
| SL1040-3R3M | 3.30 | 12 | 11.0 | 16.0 |
| SL1040-4R7M | 4.70 | 16 | 9.0 | 14.0 |
| SL1040-5R6M | 4.70 | 20 | 8.7 | 13.0 |
| SL1040-6R8M | 6.80 | 25 | 8.5 | 12.0 |
| SL1040-8R2M | 8.20 | 27 | 8.0 | 9.0 |
| SL1040-100M | 10.00 | 32 | 7.5 | 8.0 |
| SL1040-150M | 15.00 | 45 | 6.5 | 7.0 |
| SL1040-220M | 22.00 | 66 | 5.0 | 6.0 |
| SL1040-330M | 33.00 | 92 | 4.5 | 5.0 |
| SL1040-470M | 47.00 | 145 | 3.5 | 4.0 |

- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause Lo to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

SPECIFICATION

RoHS
COMPLIANT

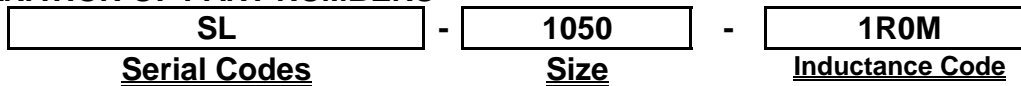
| | |
|----------|--------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 1050 | Dimensions |
|------|------------|
| A | 10.5 ± 0.5 |
| B | 11.0 ± 0.5 |
| C | 5.0 MAX |
| D | 3.0 ± 0.5 |
| E | 2.0 ± 0.5 |
| F | 12.5 Typ |
| G | 6.00 Typ |
| H | 4.00 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|----------------------------------|-----------------------------------|
| | | [Max] | I _{dc} (AMP) Typical | I _{sat} (AMP) Typical |
| SL1050-R82M | 0.82 | 2.6 | 22.0 | 38.0 |
| SL1050-1R0M | 1.00 | 2.8 | 19.5 | 30.0 |
| SL1050-1R5M | 1.50 | 3.8 | 16.0 | 26.0 |
| SL1050-2R2M | 2.20 | 6 | 14.0 | 20.0 |
| SL1050-3R3M | 3.30 | 7.5 | 12.0 | 17.0 |
| SL1050-4R7M | 4.70 | 15 | 10.0 | 15.0 |
| SL1050-5R6M | 4.70 | 17 | 9.5 | 14.0 |
| SL1050-6R8M | 6.80 | 19.5 | 9.0 | 13.0 |
| SL1050-8R2M | 8.20 | 28 | 8.5 | 11.5 |
| SL1050-100M | 10.00 | 35 | 8.0 | 10.0 |
| SL1050-150M | 15.00 | 48 | 6.5 | 9.0 |
| SL1050-220M | 22.00 | 87 | 5.5 | 8.0 |
| SL1050-330M | 33.00 | 95 | 5.0 | 6.0 |
| SL1050-470M | 47.00 | 120 | 4.0 | 5.0 |
| SL1050-680M | 68.00 | 170 | 3.5 | 4.5 |
| SL1050-101M | 100.00 | 255 | 2.5 | 3.5 |

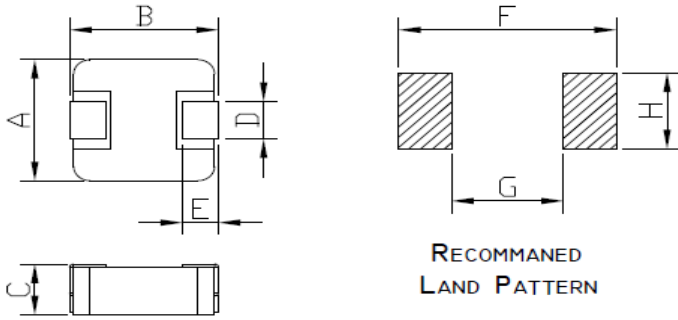
- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause L₀ to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

SPECIFICATION

RoHS
COMPLIANT

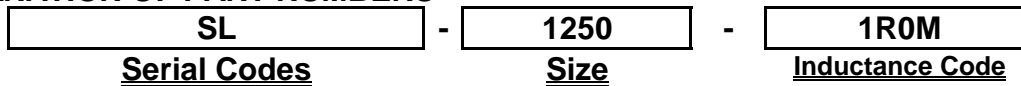
| | |
|-----------------|---------------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 1250 | Dimensions |
|------|------------|
| A | 12.8 ± 0.5 |
| B | 13.5 ± 0.5 |
| C | 5.0 MAX |
| D | 3.5 ± 0.5 |
| E | 2.5 ± 0.5 |
| F | 14.5 Typ |
| G | 8.00 Typ |
| H | 4.50 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|------------------------|-----------------------|
| | | [Max] | Idc (AMP) Typical | Isat (AMP) Typical |
| SL1250-R82M | 0.82 | 1.7 | 30.0 | 40.0 |
| SL1250-1R0M | 1.00 | 2.5 | 26.0 | 35.0 |
| SL1250-1R5M | 1.50 | 4 | 23.0 | 33.0 |
| SL1250-2R2M | 2.20 | 5.5 | 15.0 | 26.0 |
| SL1250-3R3M | 3.30 | 7.5 | 14.0 | 24.0 |
| SL1250-4R7M | 4.70 | 9 | 13.0 | 20.0 |
| SL1250-5R6M | 5.60 | 10.5 | 12.0 | 18.0 |
| SL1250-6R8M | 6.80 | 16.5 | 11.0 | 15.0 |
| SL1250-8R2M | 8.20 | 22 | 9.0 | 12.5 |
| SL1250-100M | 10.00 | 26.5 | 8.5 | 12.0 |
| SL1250-150M | 15.00 | 33 | 8.0 | 11.0 |
| SL1250-220M | 22.00 | 45 | 7.0 | 8.0 |
| SL1250-330M | 33.00 | 68 | 5.0 | 6.0 |

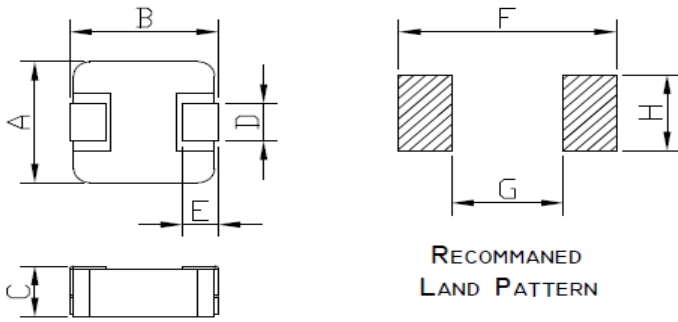
- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause Lo to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

SPECIFICATION

**RoHS
COMPLIANT**

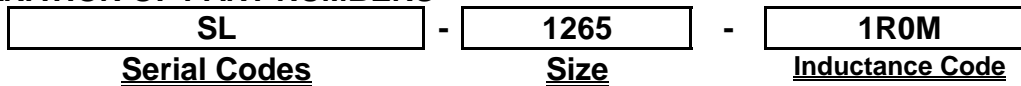
| | |
|-----------------|---------------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

PACKING DIMENSIONS (mm)



| 1265 | Dimensions |
|------|------------|
| A | 12.8 ± 0.5 |
| B | 13.5 ± 0.5 |
| C | 6.5 MAX |
| D | 3.5 ± 0.5 |
| E | 2.5 ± 0.5 |
| F | 14.5 Typ |
| G | 8.00 Typ |
| H | 4.50 Typ |

EXPLANATION OF PART NUMBERS



ELECTRICAL CHARACTERISTICS

| P/N | L0 Inductance μH ±20% @0A | DCR (mΩ) | Heat Rating Current | Saturation Current |
|-------------|---------------------------------|----------|------------------------|-----------------------|
| | | [Max] | Idc (AMP) Typical | Isat (AMP) Typical |
| SL1265-1R0M | 1.00 | 1 | 24.0 | 40.0 |
| SL1265-1R5M | 1.50 | 1.8 | 23.0 | 30.0 |
| SL1265-2R2M | 2.20 | 3.2 | 21.0 | 27.0 |
| SL1265-3R3M | 3.30 | 6.5 | 15.0 | 24.0 |
| SL1265-4R7M | 4.70 | 7.5 | 15.0 | 22.0 |
| SL1265-5R6M | 5.60 | 10.5 | 13.0 | 21.0 |
| SL1265-6R8M | 6.80 | 13.5 | 12.0 | 19.0 |
| SL1265-8R2M | 8.20 | 16 | 11.0 | 15.5 |
| SL1265-100M | 10.00 | 18 | 10.0 | 15.0 |
| SL1265-150M | 15.00 | 26 | 8.5 | 13.5 |
| SL1265-220M | 22.00 | 39.5 | 7.0 | 10.0 |
| SL1265-330M | 33.00 | 53 | 6.0 | 8.0 |
| SL1265-470M | 47.00 | 75 | 5.5 | 6.5 |
| SL1265-680M | 68.00 | 115 | 3.5 | 4.5 |
| SL1265-101M | 100.00 | 138 | 2.0 | 3.5 |

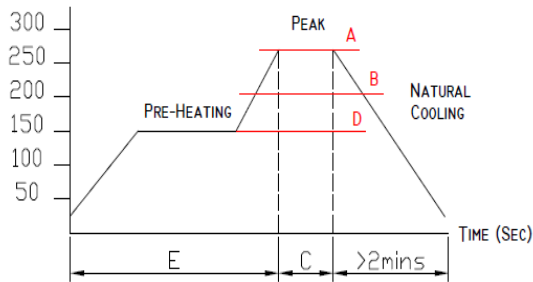
- ⊙ All test Data is referenced to 25°C ambient
- ⊙ Typical Heat Rating DC Current would cause an approximately ΔT of 40°C
- ⊙ Typical Saturation DC Current would cause Lo to drop approximately 30%
- ⊙ Operation Temperature Range : -40°C ~ 125°C
- ⊙ The Part temperature (ambient + ΔT) should not exceed 125°C under worst case operating conditions.
- ⊙ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

CHARACTERISTICS

RoHS
COMPLIANT

| | |
|----------|--------------------|
| ITEM P/N | SL0420~1265-SERIES |
| PRODUCT | SMD Inductor |

RECOMMENDED SOLDERING TEMP. GRAPH



| | |
|---|------------|
| A | 260°C |
| B | 230°C |
| C | 10 Sec |
| D | 150°C |
| E | 60~240 Sec |

MECHANICAL RELIABILITY

| TEST | Specification & Requirement | Method Used |
|---------------|--|---|
| Solderability | The surface of terminal/pin tested shall be covered with new solder by 95% | Solder heat proof: Preheating: 180 ±10°C 90 seconds Soldering: 255 ±5°C for 3 ±1 sec |
| Shock | Inductance change within ± 5% Without mechanical damage | Drop down with 981m/s ² (100G) shock Attitude upon a rubber block method shock testing machinem, 3 tests. |
| Vibration | Inductance change within ± 5% Without mechanical damage | Vibration frequency: 10Hz to 55Hz to 10Hz 60 seconds cycle Vibration time: 2 hours |

ENDURANCE RELIABILITY

| TEST | Specification & Requirement | Method Used |
|---------------------|---|--|
| Thermal Shock | Inductance change within ± 5% Without mechanical damage | -25°C, (30 mins) -> room temp. (5 mins) -> 125°C, (30 mins) -> room temp. (5 mins) 100 cycles |
| Heat Resistance | Inductance change within ± 5% Without mechanical damage | Apply IDC current @ 85°C ambient Duration: 1000 hrs |
| Humidity Resistance | Inductance change within ± 5% Without mechanical damage | Apply IDC current @ 60°C ambient Humidity: 90~95% Duration: 1000 hrs |
| Low Temp. Storing | Inductance change within ± 5% Without mechanical damage | Storing Temp. -25 ±2 °C for total 1,000 +4/-0 hours |
| High Temp. Storing | Inductance change within ± 5% Without mechanical damage | Storing Temp. 125 ±2 °C for total 1,000 +4/-0 hours |

PACKING FOR SMD

RoHS
COMPLIANT

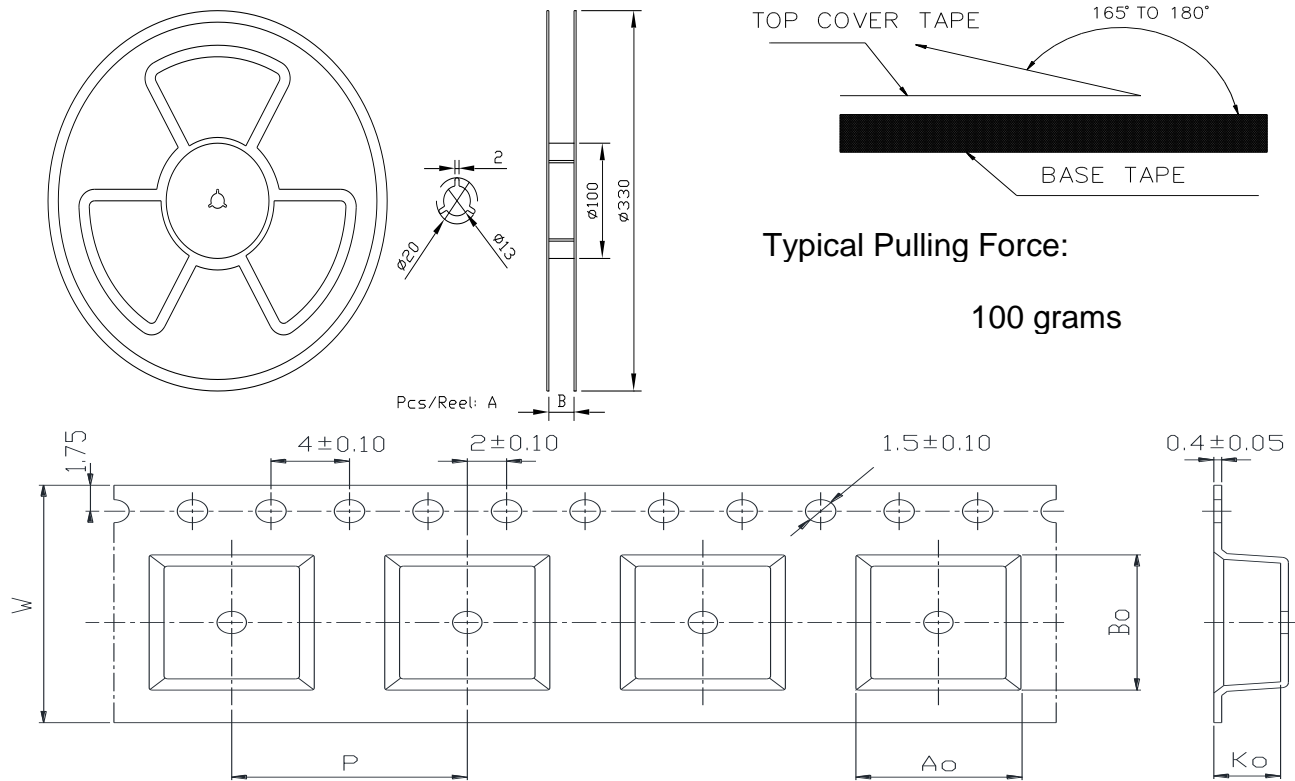
ITEM P/N

SL0420~1265-SERIES

PRODUCT

SMD Inductor

CARRIERTAPEING REEL & CARRIER MATERIALS (PAPER PLASTICS) UNIT : (mm)



Typical Pulling Force:

100 grams

| Series | A | B | W | Ao | Bo | Ko |
|--------|------|------|----|---------|----------|--------|
| 0420 | 3000 | 12 | 12 | 4.6Typ | 4.75 Typ | 2.3Typ |
| 0520 | 2000 | 12.5 | 12 | 5.7Typ | 5.90 Typ | 2.3Typ |
| 0530 | 2000 | 12.5 | 12 | 5.7Typ | 5.90 Typ | 3.6Typ |
| 0620 | 2000 | 17 | 16 | 6.9Typ | 7.6 Typ | 2.3Typ |
| 0624 | 1000 | 17 | 16 | 6.9Typ | 7.6 Typ | 2.3Typ |
| 0630 | 1000 | 17 | 16 | 6.9Typ | 7.6 Typ | 3.3Typ |
| 0650 | 1000 | 17 | 16 | 6.9Typ | 7.6 Typ | 5.4Typ |
| 1040 | 800 | 25 | 24 | 11.0Typ | 12.6 Typ | 4.3Typ |
| 1050 | 800 | 25 | 24 | 11.0Typ | 12.6 Typ | 5.4Typ |
| 1250 | 500 | 25 | 24 | 13.1Typ | 15.0 Typ | 5.3Typ |
| 1265 | 500 | 25 | 24 | 13.1Typ | 15.0 Typ | 6.8Typ |

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[HCR15JTRF](#) [NIN-HCR33JTRF](#) [NIN-HDR22JTRF](#) [NIN-HDR82JTRF](#) [NIN-HK2N7STRF](#) [NIN-PA150KTR370F](#) [NIN-PB100KTR550F](#)