



SMD MOLDED POWER INDUCTORS

LPM 0420,0630 SERIES

FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/H, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- Frequency up to 5MHz.

OPTIONS:

- Tape & Reel is Standard (Qty:1000pcs.)
- Bulk packaging Available for Smaller Quantities
- Tolerance:M=20% ,N=30% is Standard,Tighter Tolerances Available

COMMON APPLICATIONS:

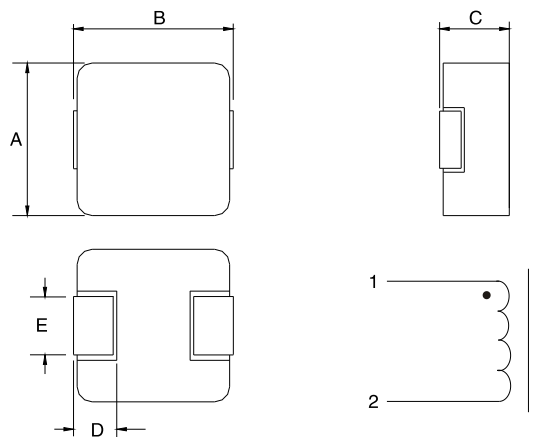
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

ELECTRICAL CHARACTERISTICS:

| Part Number | Inductance L0(μH) ± 20% @0A dc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) | Part Number | Inductance L0(μH) ± 20% @0A dc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|---------------|--------------------------------|------------------------------------|------------------------------------|---------------|---------------|--------------|--------------------------------|------------------------------------|------------------------------------|---------------|---------------|
| LPM0420-R047M | 0.047 | 15 | 15 | 2.5 | 3 | LPM0630-R82M | 0.82 | 13 | 24 | 4.9 | 7.8 |
| LPM0420-R10M | 0.1 | 12 | 12 | 4.5 | 5.5 | LPM0630-1R0M | 1.0 | 12 | 22 | 7.4 | 9.4 |
| LPM0420-R22M | 0.22 | 9.5 | 9.5 | 8 | 9.5 | LPM0630-1R5M | 1.5 | 10 | 18 | 8.6 | 14 |
| LPM0420-R47M | 0.47 | 6 | 6 | 17.5 | 19 | LPM0630-2R2M | 2.2 | 8 | 15 | 12.3 | 18 |
| LPM0420-1R0M | 1.0 | 4.2 | 4.5 | 41.5 | 43 | LPM0630-3R3M | 3.3 | 6 | 11.5 | 17.3 | 25 |
| LPM0420-1R2M | 1.2 | 3.75 | 3.75 | 54.5 | 55.6 | LPM0630-4R7M | 4.7 | 5.5 | 10 | 24.2 | 32 |
| LPM0420-1R5M | 1.5 | 3.25 | 3.25 | 67 | 68 | LPM0630-5R6M | 5.6 | 5.0 | 8.5 | 30.6 | 40 |
| LPM0420-2R2M | 2.2 | 2.75 | 3 | 77.5 | 79 | LPM0630-6R8M | 6.8 | 4.5 | 8.0 | 37 | 44 |
| LPM0630-R20M | 0.2 | 24 | 41 | 2 | 3.0 | LPM0630-8R2M | 8.2 | 4.0 | 6.5 | 50 | 60 |
| LPM0630-R33M | 0.33 | 20 | 30 | 2.1 | 3.4 | LPM0630-100M | 10 | 3.5 | 5.5 | 56 | 72 |
| LPM0630-R47M | 0.47 | 17.5 | 26 | 4.0 | 5.3 | LPM0630-150M | 15 | 3.0 | 5 | 84 | 105 |
| LPM0630-R68M | 0.68 | 16.0 | 25 | 4.6 | 6.4 | LPM0630-220M | 22 | 2.5 | 4.5 | 112 | 165 |

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Test Frequency : 100KHz / 0.25Vdc
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately, ΔT=40°C without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 20%
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature: -40°C - +105°C.



Dimensions(mm)

| Series | A(mm) | B(mm) | C(mm) | D(mm) | E(mm) | | |
|----------|--------------|--------------|----------|------------|-----------|--|--|
| LPM 0420 | 4.06 ± 0.254 | 4.45 ± 0.254 | 2.0 max. | 0.76 ± 0.3 | 2.3 ± 0.2 | | |
| LPM 0630 | 6.6 ± 0.2 | 7.2 ± 0.2 | 3.0 max. | 1.5 ± 0.5 | 3.0 ± 0.2 | | |

Note:All specifications subject to change without notice.



SMD MOLDED POWER INDUCTORS

LPM 1040,1045 SERIES

FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/H, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- Frequency up to 5MHz.

OPTIONS:

- Tape & Reel is Standard (Qty:1000pcs.)
- Bulk packaging Available for Smaller Quantities
- Tolerance:M=20% ,N=30% is Standard, Tighter Tolerances Available

COMMON APPLICATIONS:

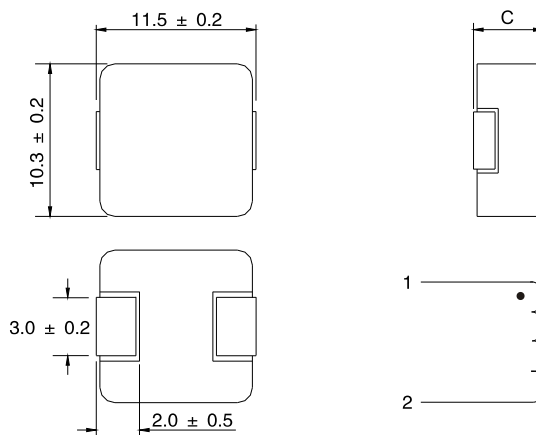
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

ELECTRICAL CHARACTERISTICS:

| Part Number | Inductance L0(μH) ± 20% @0Adc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) | Part Number | Inductance L0(μH) ± 20% @0Adc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|--------------|-------------------------------|------------------------------------|------------------------------------|---------------|---------------|--------------|-------------------------------|------------------------------------|------------------------------------|---------------|---------------|
| LPM1040-R20M | 0.2 | 36 | 66 | 1.8 | 3.5 | LPM1040-5R6M | 5.6 | 8.5 | 15 | 18.9 | 25 |
| LPM1040-R33M | 0.33 | 31 | 60 | 2.0 | 3.8 | LPM1040-6R8M | 6.8 | 8.0 | 14 | 23.5 | 30 |
| LPM1040-R47M | 0.47 | 28.5 | 54 | 2.1 | 4.0 | LPM1040-8R2M | 8.2 | 7.0 | 12.5 | 28.3 | 35 |
| LPM1040-R56M | 0.56 | 27.5 | 49 | 2.2 | 4.5 | LPM1045-100M | 10 | 6.8 | 11.5 | 30.2 | 38 |
| LPM1040-R68M | 0.68 | 24 | 42 | 2.8 | 5.0 | LPM1045-150M | 15 | 5.0 | 9 | 48 | 55 |
| LPM1040-R82M | 0.82 | 22 | 39 | 3.0 | 7.0 | LPM1045-220M | 22 | 4.5 | 8 | 50 | 58 |
| LPM1040-1R0M | 1.0 | 17.5 | 32 | 3.5 | 7.5 | LPM1045-330M | 33 | 3.5 | 6.5 | 75 | 90 |
| LPM1040-1R2M | 1.2 | 19.5 | 29 | 4.3 | 7.9 | LPM1045-470M | 47 | 3.0 | 5 | 110 | 130 |
| LPM1040-1R5M | 1.5 | 15 | 27.5 | 5.2 | 8.0 | | | | | | |
| LPM1040-2R2M | 2.2 | 12 | 21.5 | 6.5 | 10 | | | | | | |
| LPM1040-3R3M | 3.3 | 10 | 18.6 | 10.1 | 14 | | | | | | |
| LPM1040-4R7M | 4.7 | 9.5 | 16.5 | 15.5 | 23.6 | | | | | | |

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

- Test Frequency : 100KHz / 0.25Vdc
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- Heat Rated Current (Irms) will cause the coil temperature rise approximately, ΔT=40°C without core loss.
- Saturation Current (Isat) will cause L0 to drop approximately 20%
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature: -40°C - +105°C.



Dimensions(mm)

| Series | C |
|---------|--------|
| LPM1040 | 4.5Max |
| LPM1045 | 5.5Max |

Note:All specifications subject to change without notice.



SMD MOLDED POWER INDUCTORS

LPM 1240,1250,1260

1265,1270 SERIES

FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
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- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- Frequency up to 5MHz.

OPTIONS:

- Tape & Reel is Standard (Qty:1000pcs.)
- Bulk packaging Available for Smaller Quantities
- Tolerance:M=20% ,N=30% is Standard, Tighter Tolerances Available

COMMON APPLICATIONS:

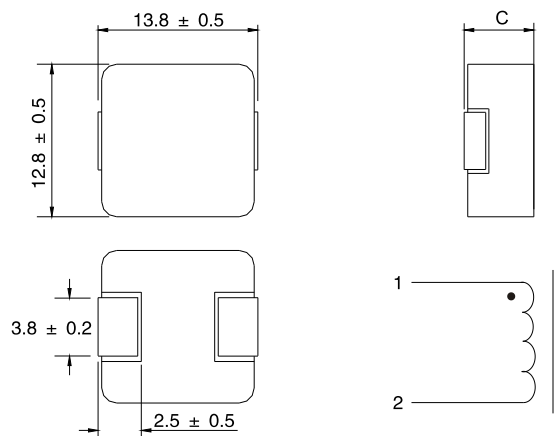
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ELECTRICAL CHARACTERISTICS:

| Part Number | Inductance L0(μH) ± 20% @0Adc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) | Part Number | Inductance L0(μH) ± 20% @0Adc | Heat rating current DC Amps IDC(A) | Saturation current DC Amps Isat(A) | DCR Typ. (mΩ) | DCR Max. (mΩ) |
|--------------|-------------------------------|------------------------------------|------------------------------------|---------------|---------------|--------------|-------------------------------|------------------------------------|------------------------------------|---------------|---------------|
| LPM1240-R22M | 0.22 | 45 | 85.5 | 1.5 | 3.0 | LPM1260-5R6M | 5.6 | 11.5 | 20 | 10.5 | 15 |
| LPM1240-R33M | 0.33 | 42 | 80.5 | 1.8 | 3.5 | LPM1260-6R8M | 6.8 | 11.0 | 18.5 | 13 | 17 |
| LPM1240-R47M | 0.47 | 38 | 65 | 2.0 | 4.0 | LPM1260-8R2M | 8.2 | 10 | 17 | 18 | 23 |
| LPM1240-R56M | 0.56 | 36 | 55 | 2.3 | 5.0 | LPM1260-100M | 10 | 9.5 | 16 | 25 | 30 |
| LPM1240-R68M | 0.65 | 34 | 54 | 2.7 | 5.5 | LPM1265-150M | 15 | 9.0 | 14.5 | 36 | 45 |
| LPM1250-R82M | 0.82 | 31 | 53 | 3.0 | 6.5 | LPM1265-220M | 22 | 8.0 | 13 | 39 | 50 |
| LPM1250-1R0M | 1.0 | 29 | 50 | 3.5 | 7.0 | LPM1265-330M | 33 | 7.0 | 11 | 42 | 55 |
| LPM1250-1R2M | 1.2 | 26 | 49 | 3.9 | 7.5 | LPM1265-470M | 47 | 6.0 | 10 | 61 | 85 |
| LPM1250-1R5M | 1.5 | 23 | 48 | 4.3 | 8.0 | LPM1265-680M | 68 | 4.5 | 8.5 | 92 | 110 |
| LPM1250-2R2M | 2.2 | 20 | 32 | 5.0 | 9.0 | LPM1275-820M | 82 | 3.5 | 6.5 | 104 | 125 |
| LPM1250-3R3M | 3.3 | 15 | 27.5 | 6.5 | 11 | LPM1270-101M | 100 | 3.0 | 5.5 | 111.5 | 140 |
| LPM1260-4R7M | 4.7 | 12 | 22.5 | 8.5 | 13 | | | | | | |

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

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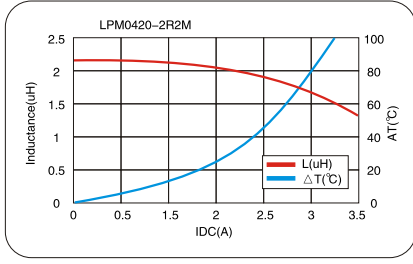
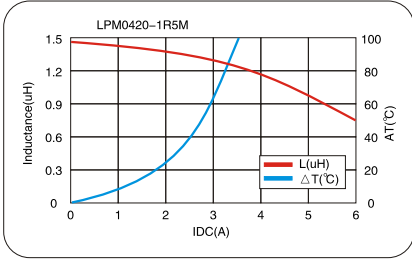
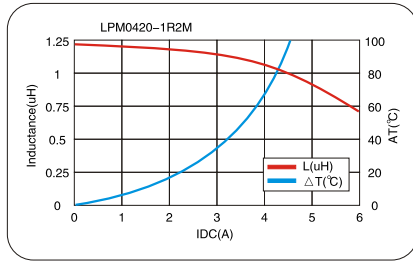
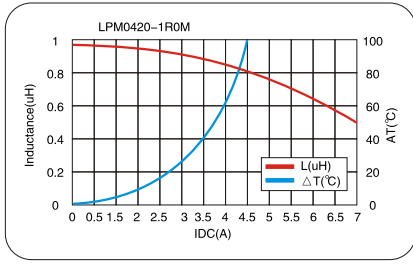
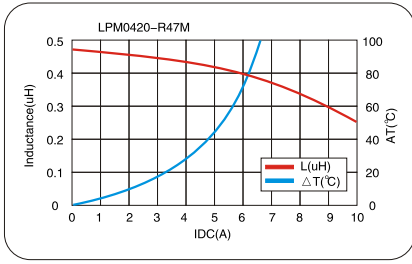
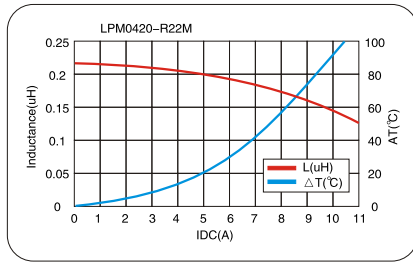
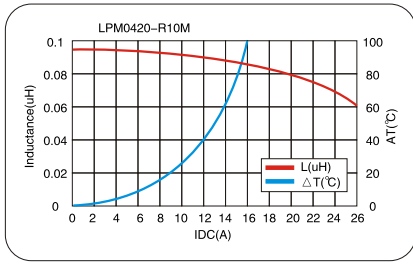
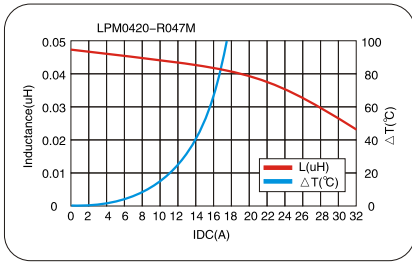
Dimensions(mm)

| Series | LPM1240 | LPM1250 | LPM1260 | LPM1265 | LPM1270 |
|--------|---------|---------|---------|---------|---------|
| C | 5.0Max | 6.0Max | 7.0Max | 7.5Max | 8.0Max |

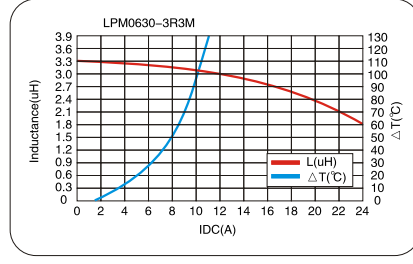
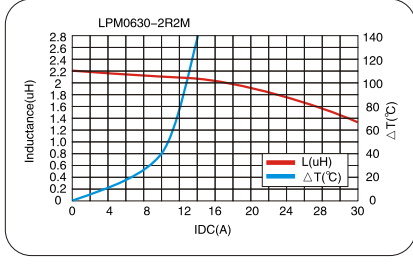
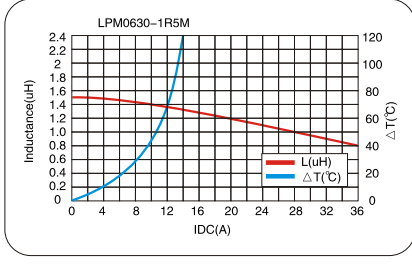
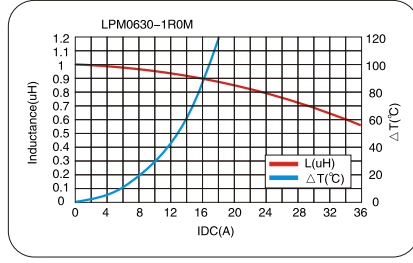
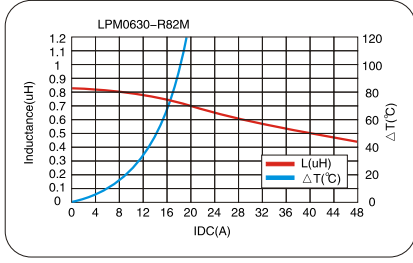
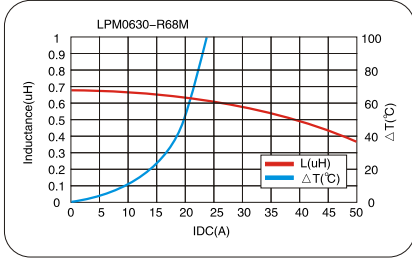
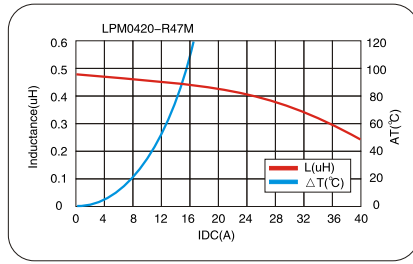
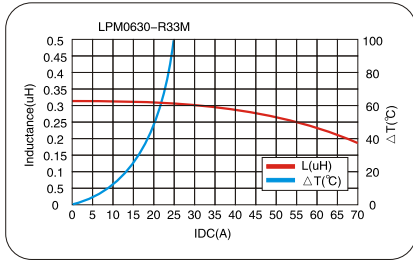
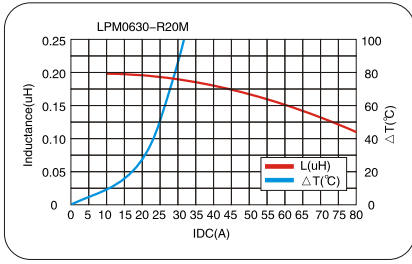
Note:All specifications subject to change without notice.

PERFORMANCE CURVE

LPM0420 Series

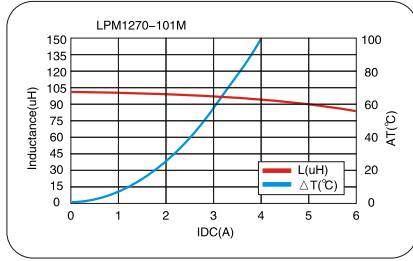
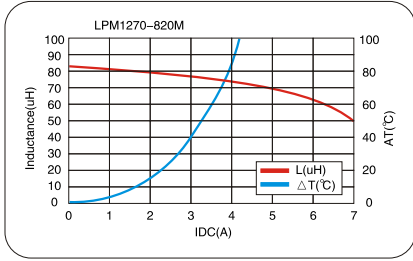
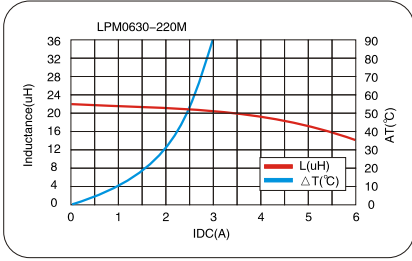
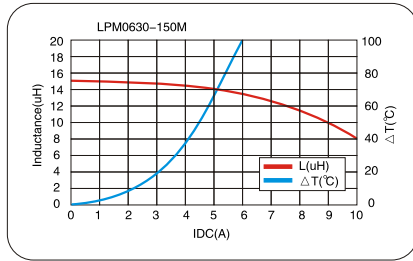
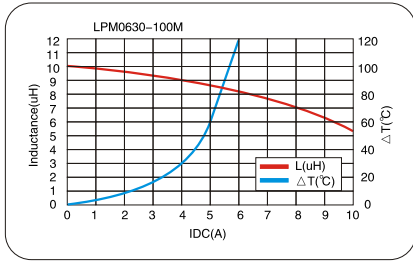
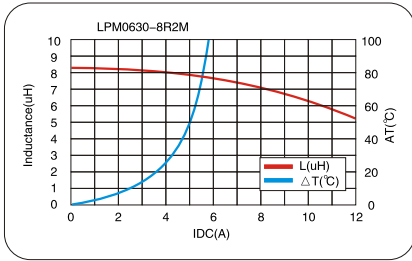
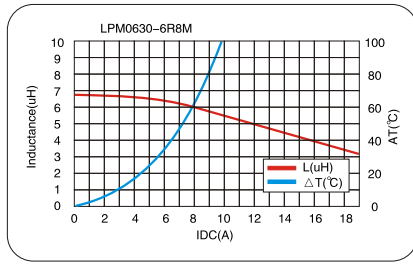
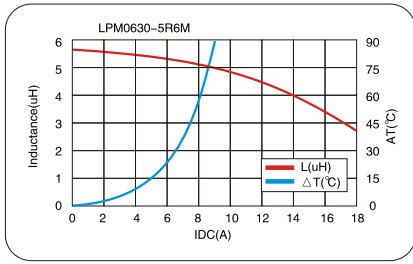
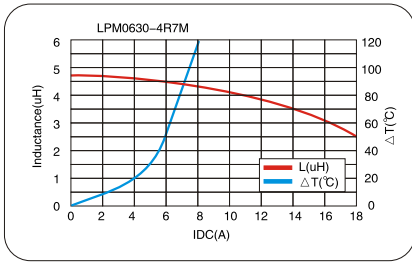


LPM0630 Series

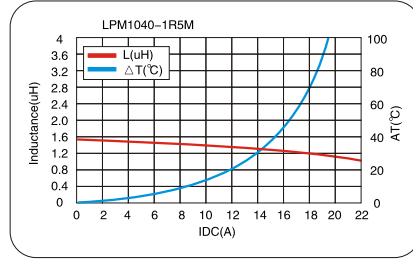
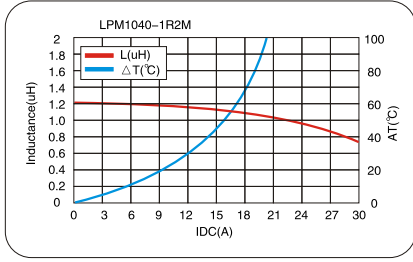
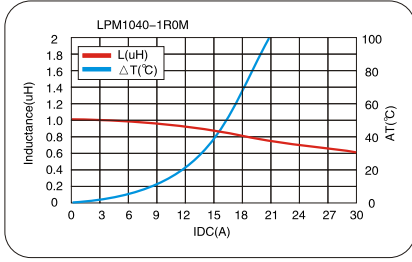
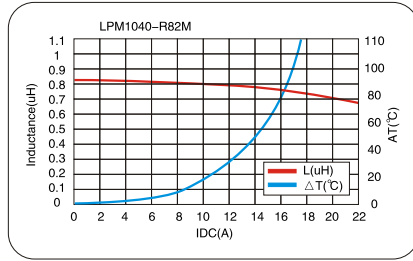
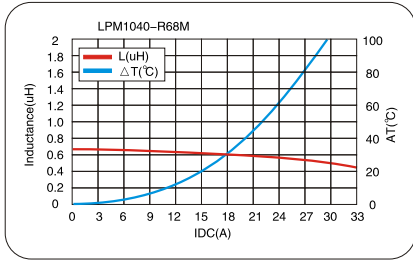
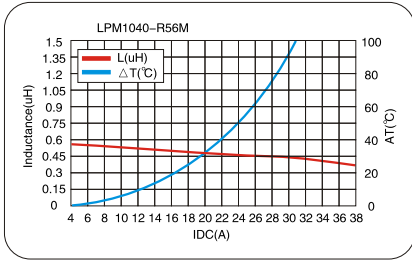
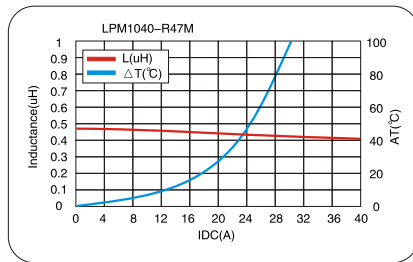
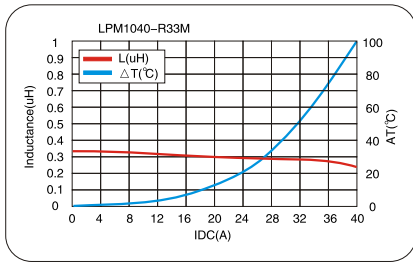
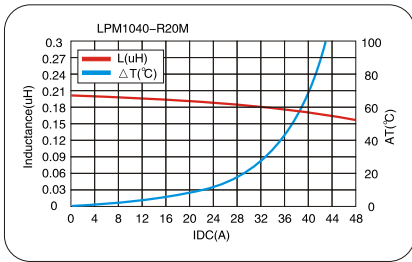


PERFORMANCE CURVE

LPM0630,1270 Series

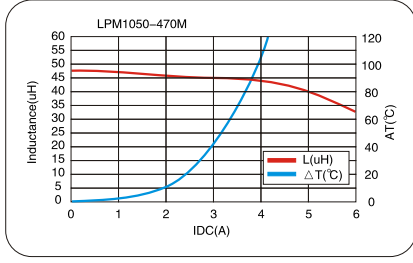
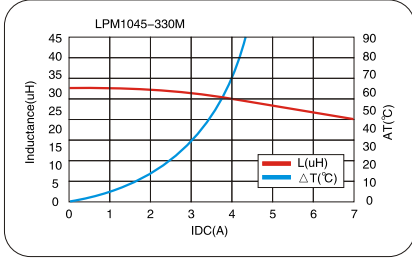
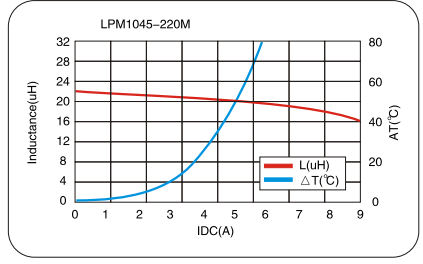
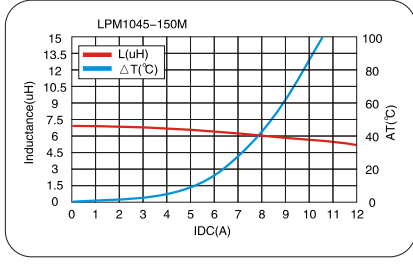
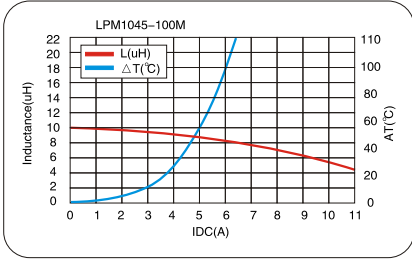
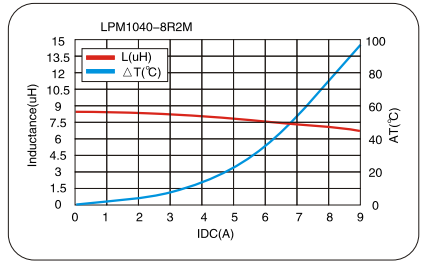
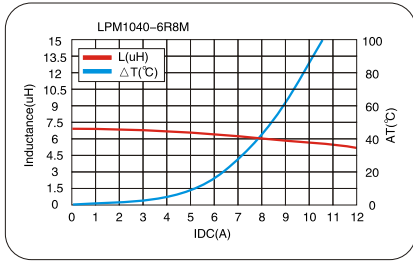
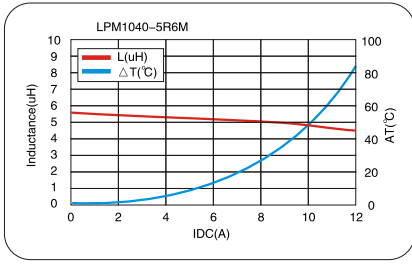
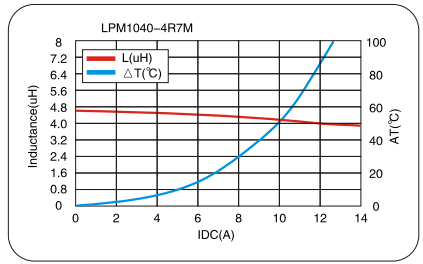
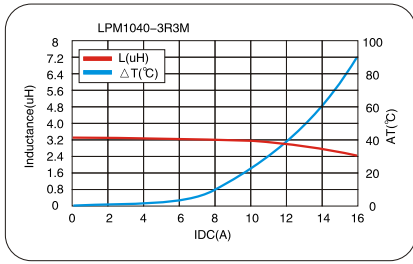
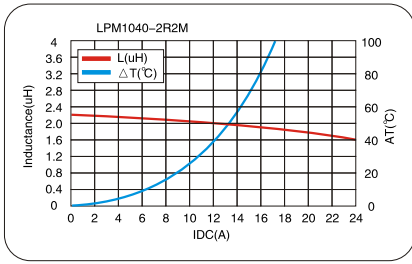


LPM1040 Series

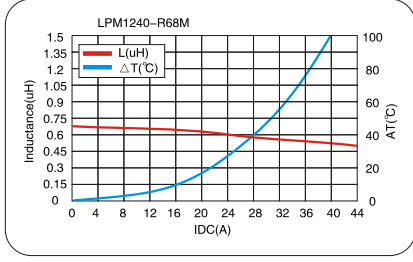
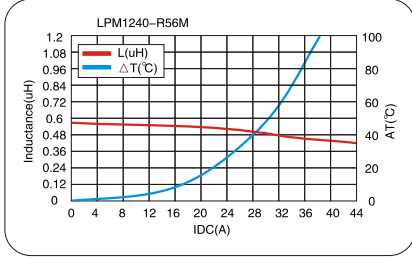
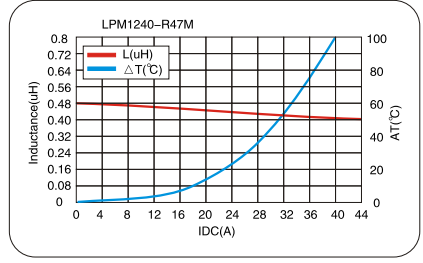
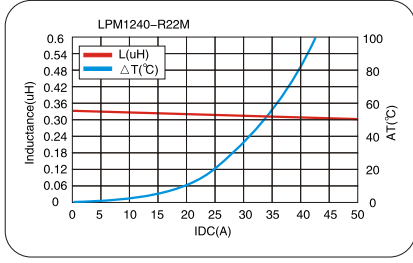
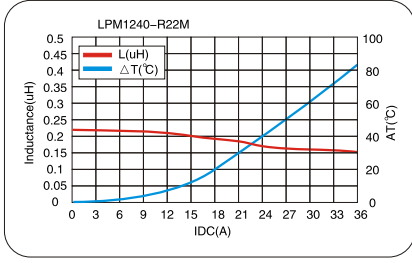


PERFORMANCE CURVE

LPM1040,1045 Series

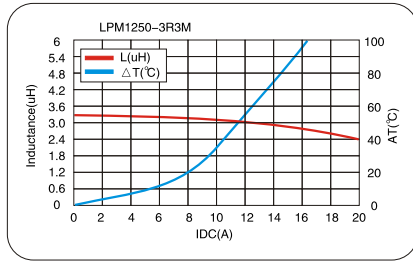
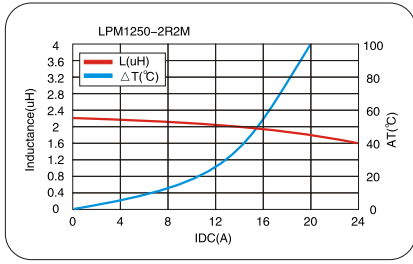
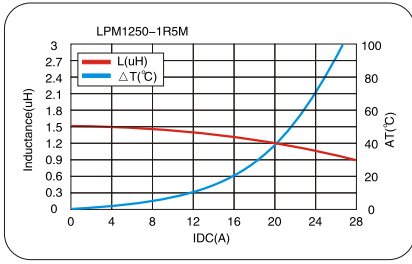
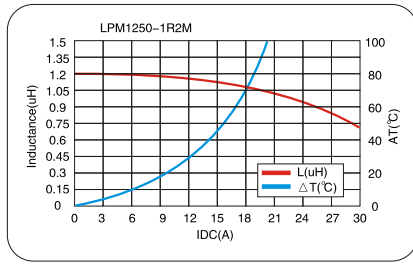
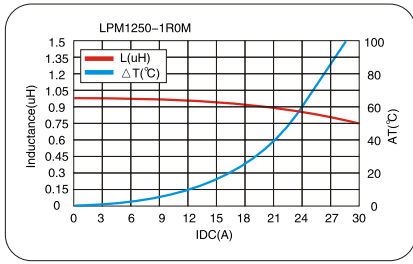
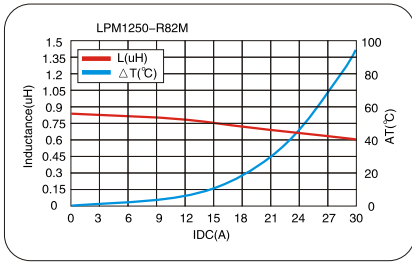


LPM1240 Series

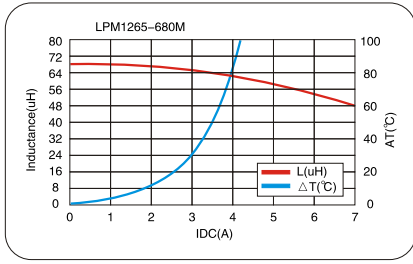
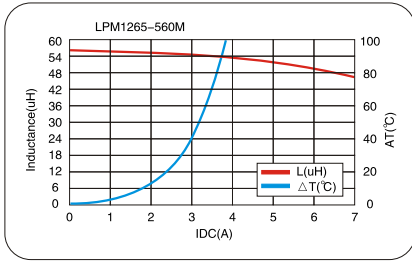
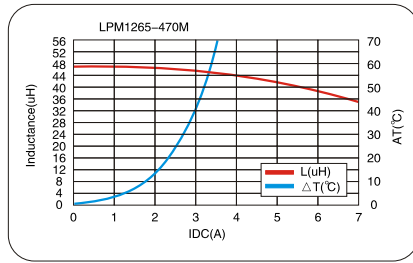
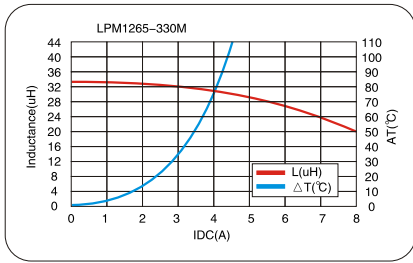
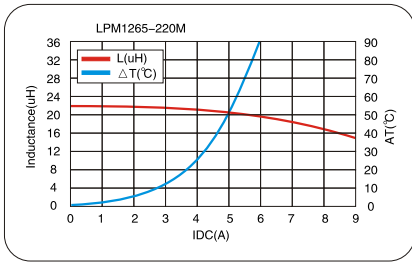
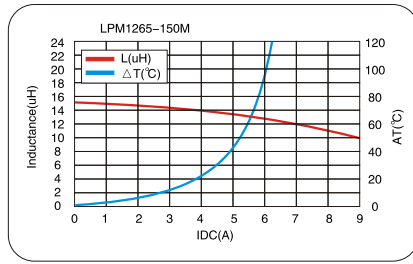
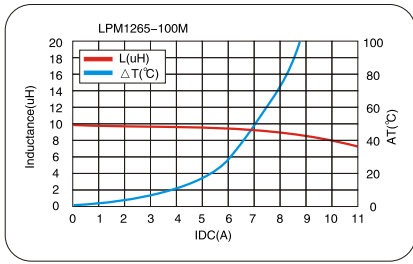
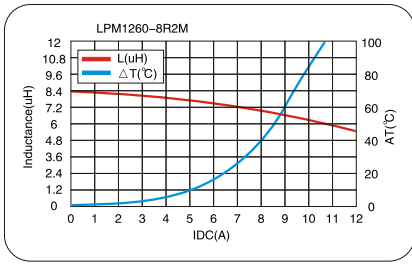
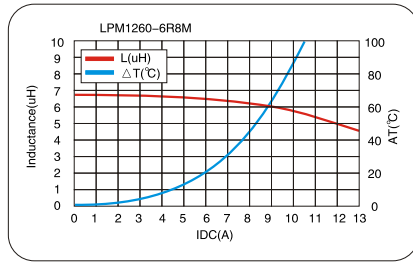
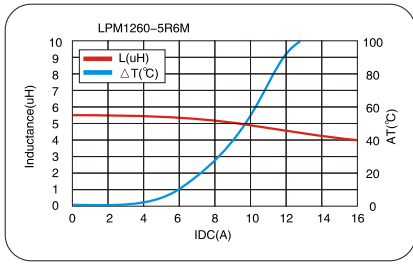
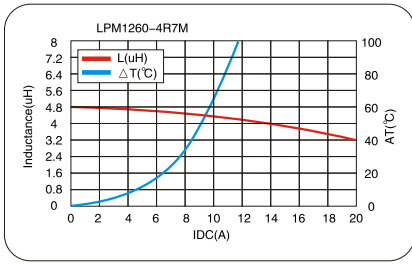


PERFORMANCE CURVE

LPM1250 Series

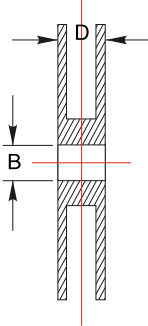
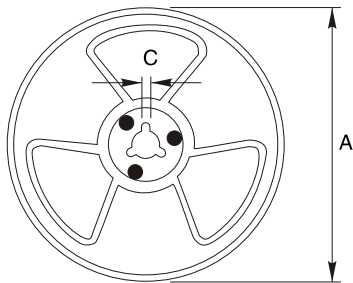


LPM1260,1265 Series

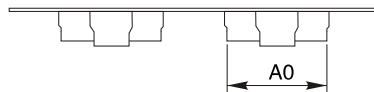
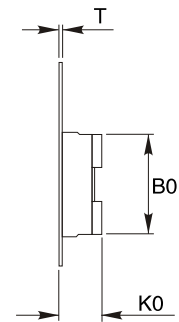
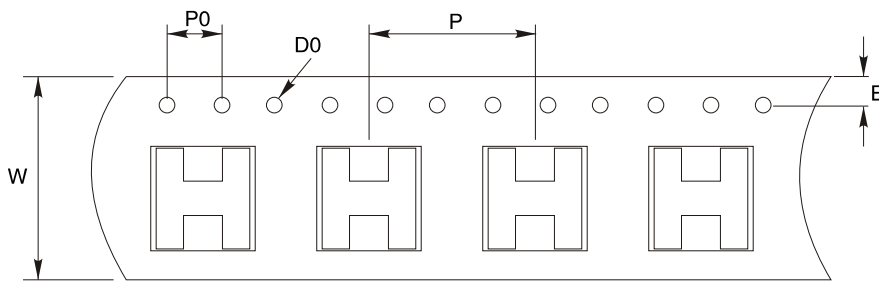


PRODUCT PACKAGING

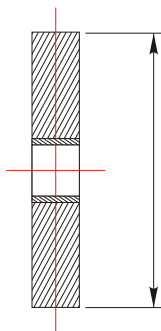
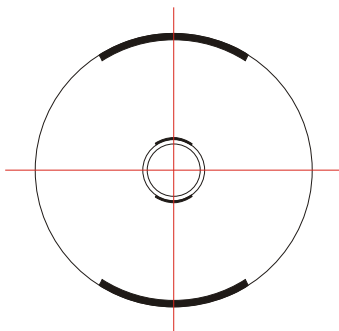
LPM0630 Series



| | |
|---|---------------------|
| | 13" |
| A | $\phi 330 \pm 2.0$ |
| B | $\phi 76.5 \pm 2.0$ |
| C | $\phi 2.3$ |
| D | 16(tape 13.3) |



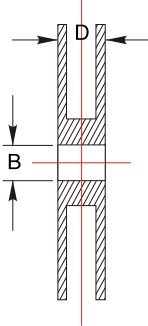
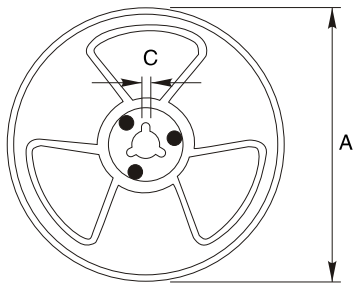
| Size | W | A0 | B0 | D0 | E | K0 | P0 | P | T |
|------|----------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|----------------|
| 0630 | 16.0 ± 0.3 | 6.8 ± 0.1 | 6.8 ± 0.1 | 1.5 ± 0.1 | 1.75 ± 0.1 | 2.8 ± 0.1 | 4.0 ± 0.1 | 12.0 ± 0.1 | 0.4 ± 0.05 |



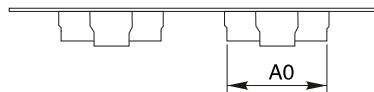
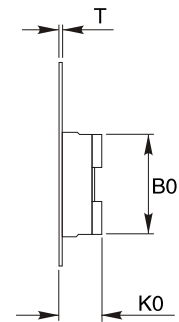
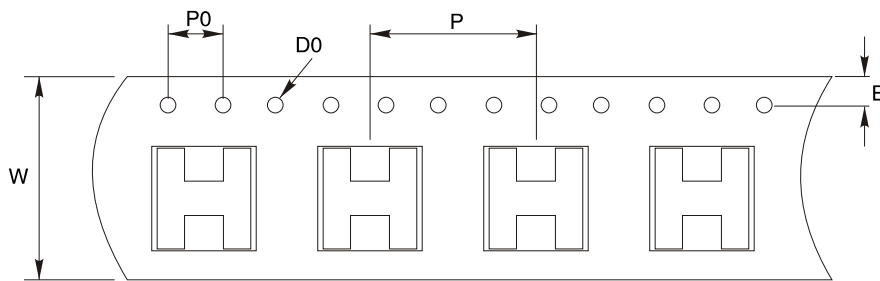
| Unit | Size | PCS |
|----------------|---------------|-------|
| 1 reel | 330*29mm | 2000 |
| 2 reels/box | 340*65*340mm | 6000 |
| 4 boxes/carton | 355*285*365mm | 24000 |

PRODUCT PACKAGING

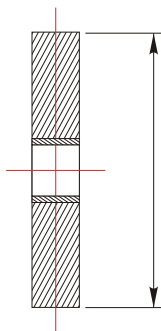
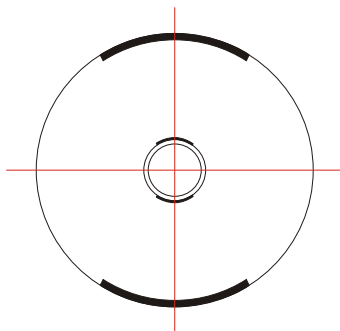
LPM1040 Series



| | |
|---|---------------------------|
| | 13" |
| A | $\phi 330 \pm 2.0$ |
| B | $\phi 76.5 \pm 2.0$ |
| C | $\phi 2.3$ |
| D | 24(tape 21.3 ± 0.15) |



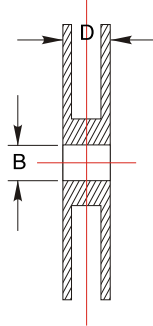
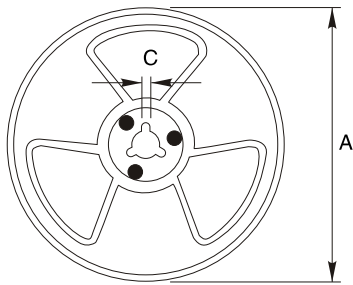
| Size | W | A0 | B0 | D0 | E | K0 | P0 | P | T |
|------|----------------|----------------|----------------|---------------|----------------|---------------|---------------|----------------|----------------|
| 1040 | 24.0 ± 0.3 | 10.6 ± 0.1 | 11.6 ± 0.1 | 1.5 ± 0.1 | 1.75 ± 0.1 | 4.2 ± 0.1 | 4.0 ± 0.1 | 16.0 ± 0.1 | 0.4 ± 0.05 |



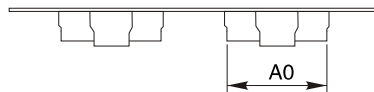
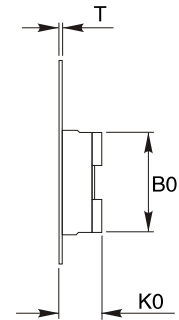
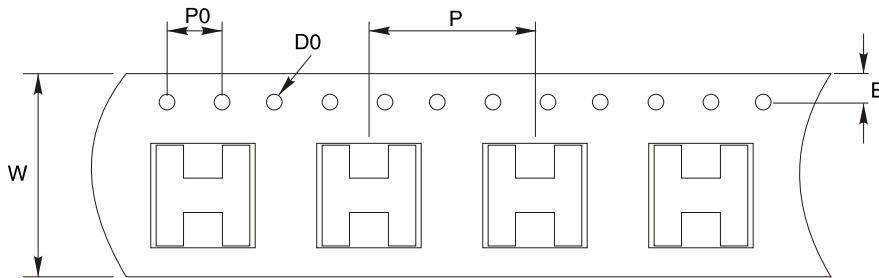
| Unit | Size | PCS |
|----------------|---------------|------|
| 1 reel | 330*29mm | 1000 |
| 2 reels/box | 340*65*340mm | 2000 |
| 4 boxes/carton | 355*285*365mm | 8000 |

PRODUCT PACKAGING

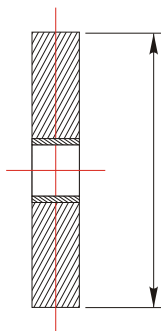
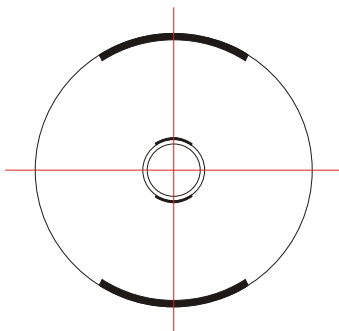
LPM1260 Series



| | |
|---|---------------------------|
| | 13" |
| A | $\phi 330 \pm 2.0$ |
| B | $\phi 76.5 \pm 2.0$ |
| C | $\phi 2.3$ |
| D | 24(tape 21.3 ± 0.15) |



| Size | W | A0 | B0 | D0 | E | K0 | P0 | P | T |
|------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|----------------|
| 1260 | 24.0 ± 0.3 | 13.1 ± 0.1 | 14.1 ± 0.1 | 1.5 ± 0.1 | 1.75 ± 0.1 | 6.0 ± 0.1 | 20.0 ± 0.1 | 16.0 ± 0.1 | 0.4 ± 0.05 |



| Unit | Size | PCS |
|----------------|---------------|------|
| 1 reel | 330*29mm | 1000 |
| 2 reels/box | 340*65*340mm | 2000 |
| 4 boxes/carton | 355*285*365mm | 8000 |