



SMD MOLDED POWER INDUCTORS

LPM 0420,0630 SERIES

FEATURES:

- Lowest height in this package footprint.
- Shielded construction.
- Lowest DCR/uH, 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:

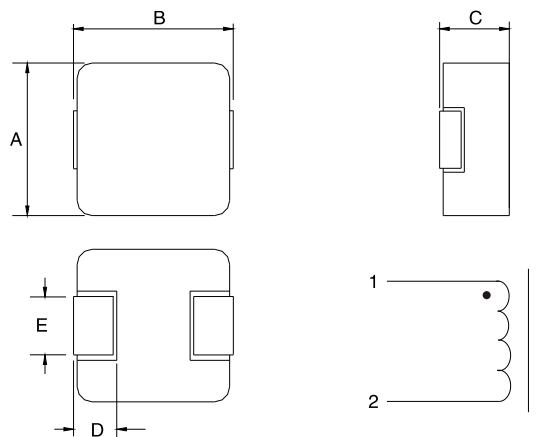
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

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)
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, $\Delta T=40^{\circ}\text{C}$ 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: $-40^{\circ}\text{C} - +105^{\circ}\text{C}$.



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:

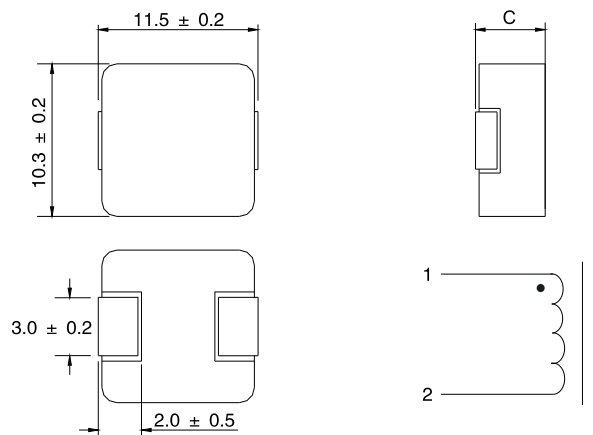
- Excellent for power line DC-DC conversion
- Applications used in power switching
- Personal computers and other handheld electronic equipment.

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:

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- Heat Rated Current (Irms) will cause the coil temperature rise approximately, $\Delta T=40^{\circ}\text{C}$ 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: $-40^{\circ}\text{C} - +105^{\circ}\text{C}$.



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.
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OPTIONS:

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COMMON APPLICATIONS:

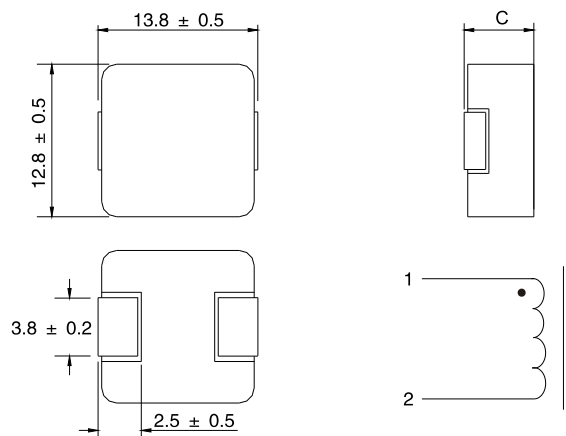
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ELECTRICAL CHARACTERISTICS:

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	0.68	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						

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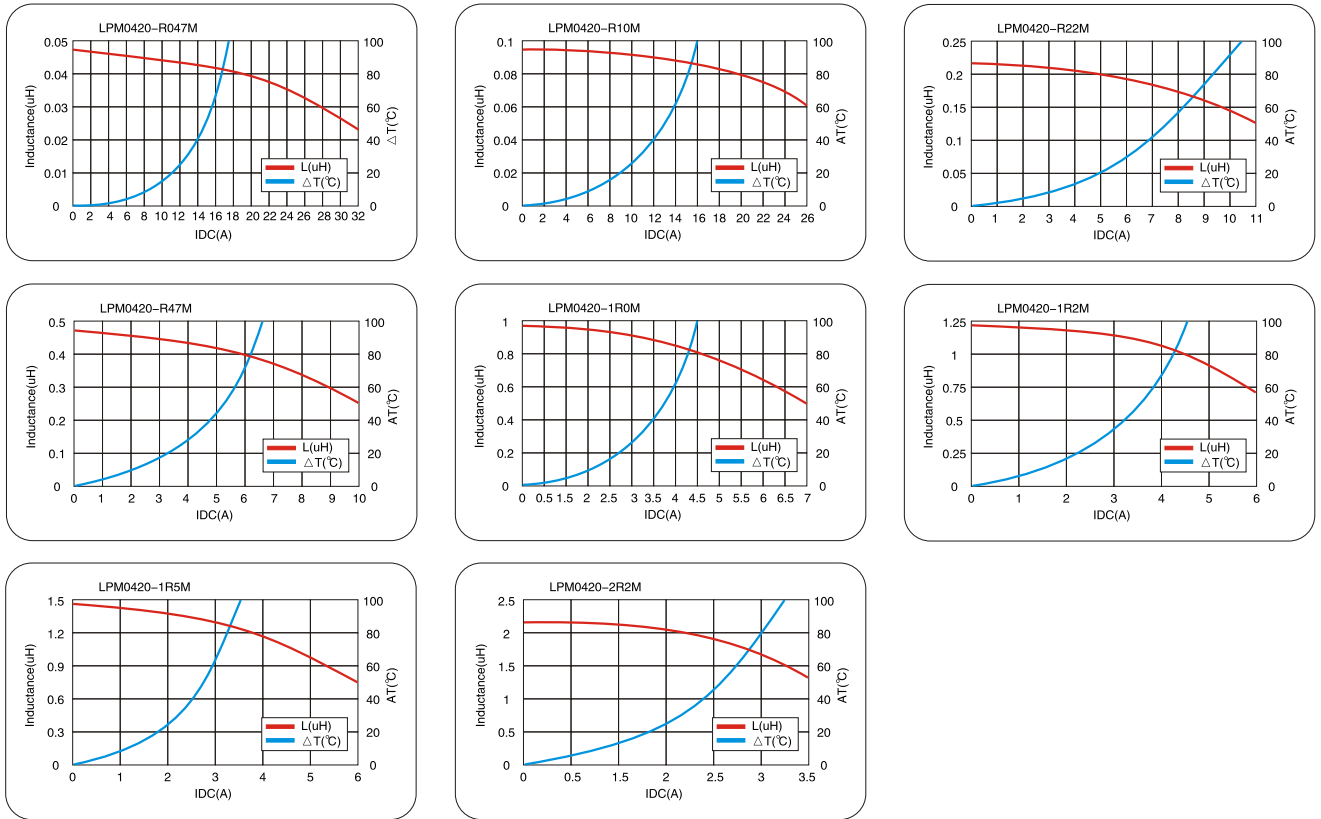
Dimensions(mm)

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

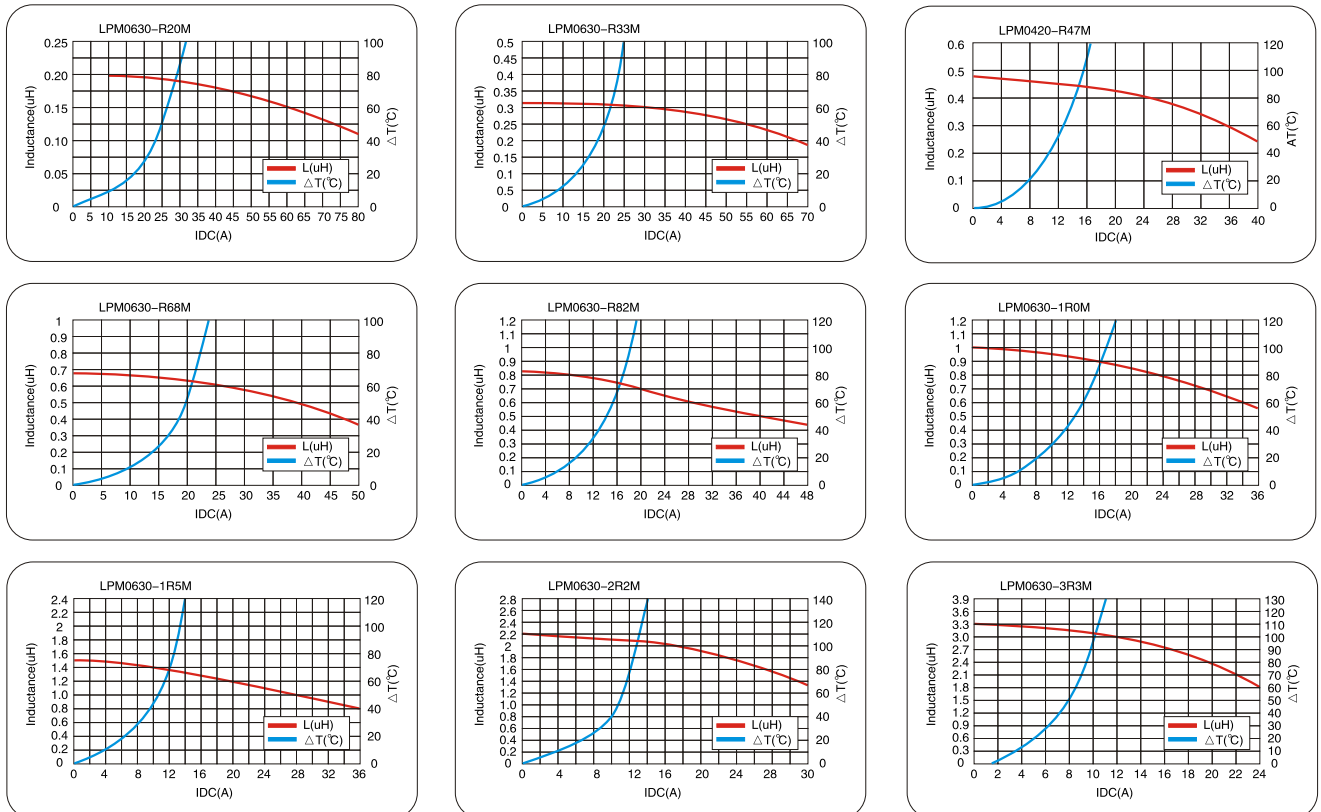
Note:All specifications subject to change without notice.

PERFORMANCE CURVE

LPM0420 Series

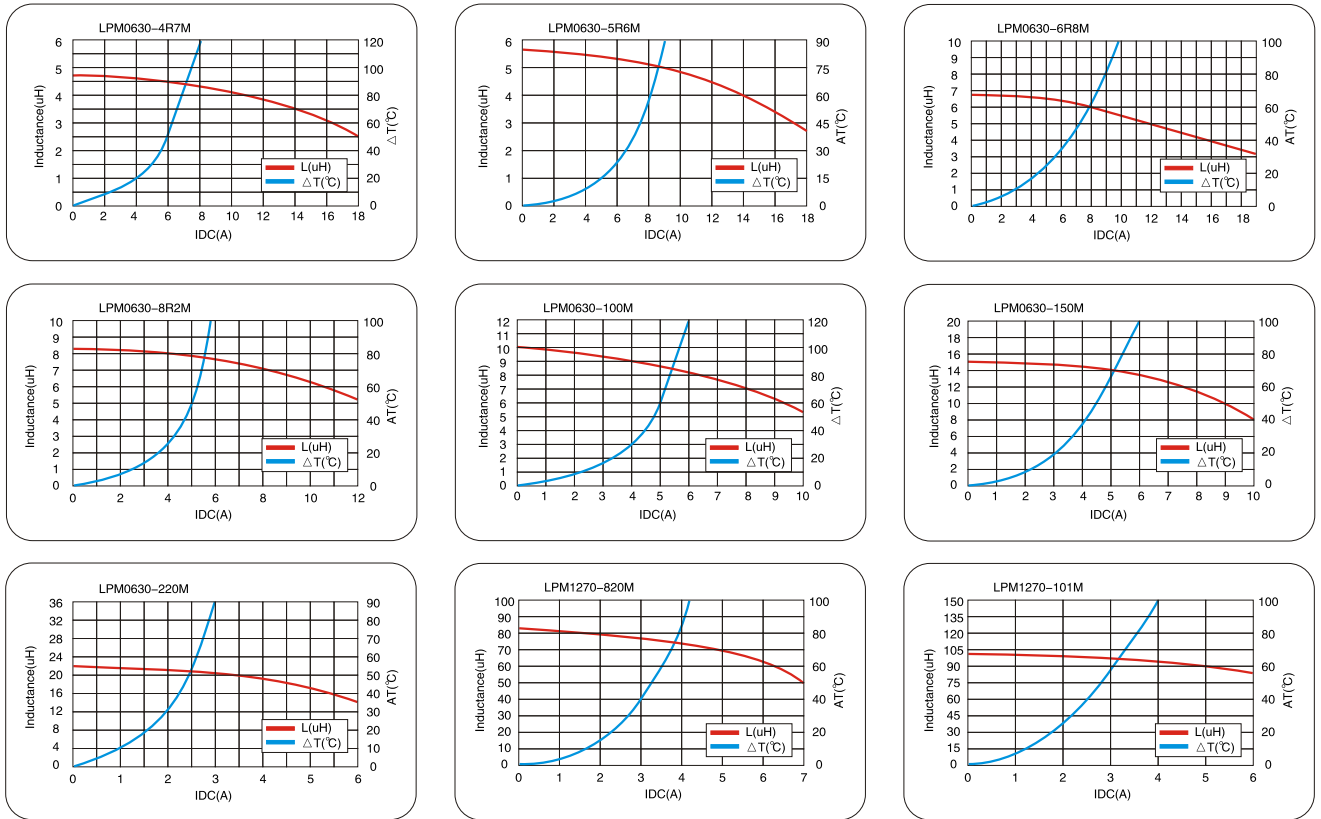


LPM0630 Series

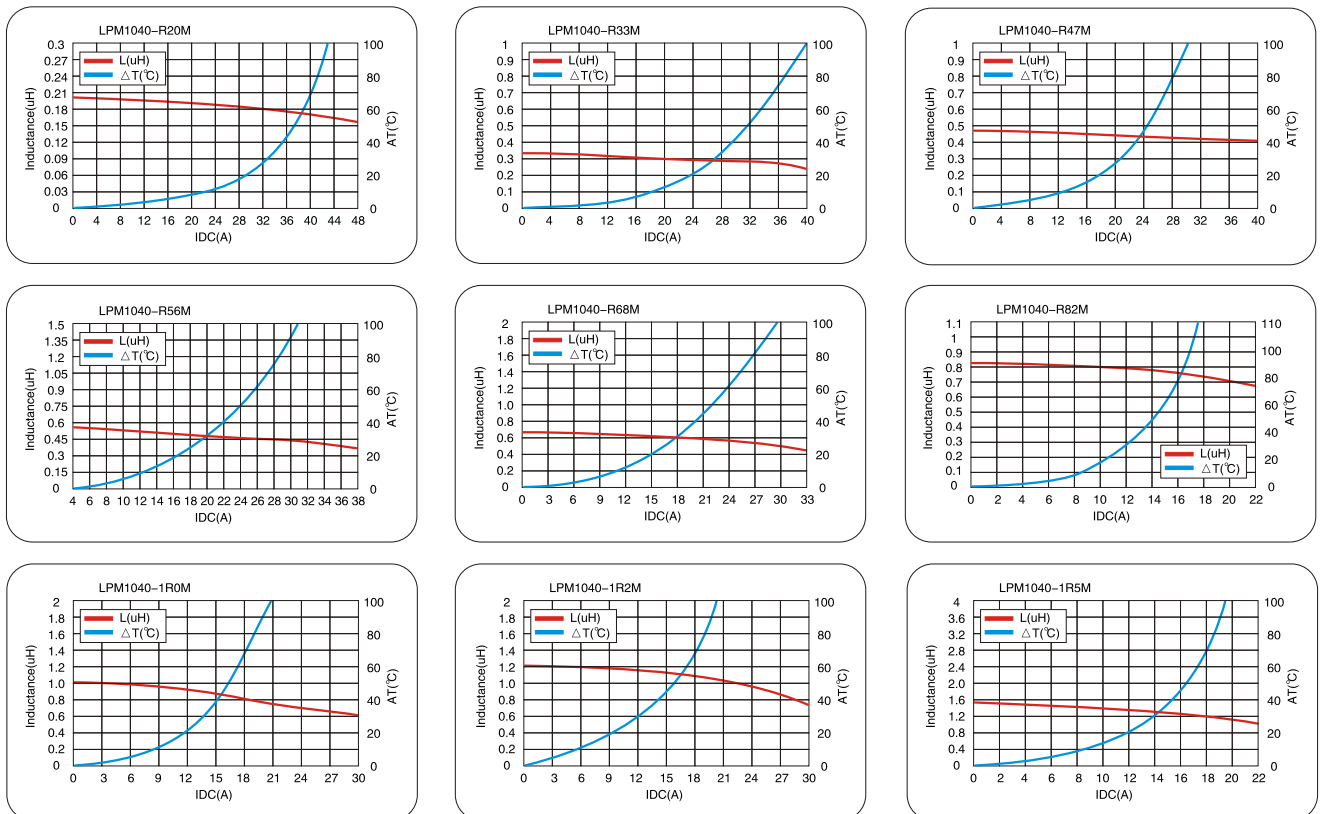


PERFORMANCE CURVE

LPM0630,1270 Series

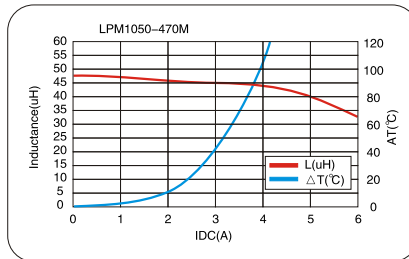
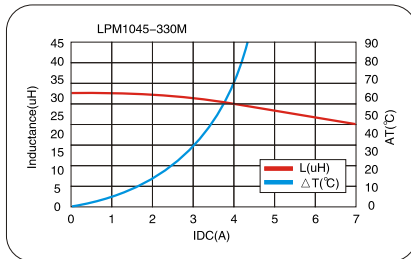
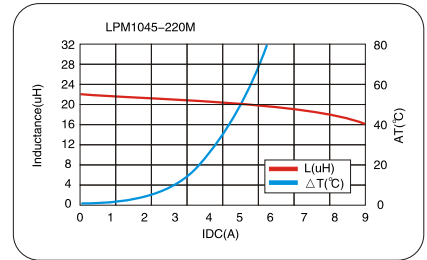
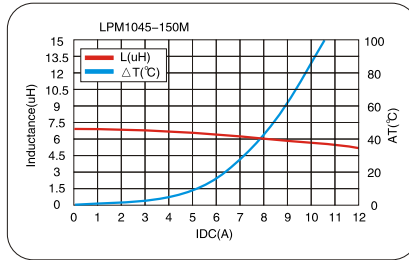
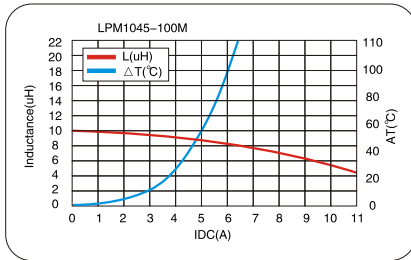
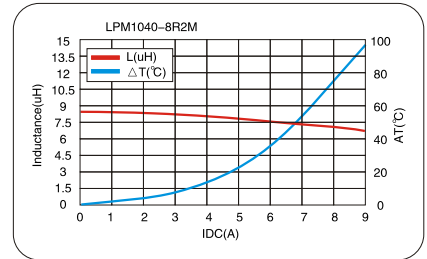
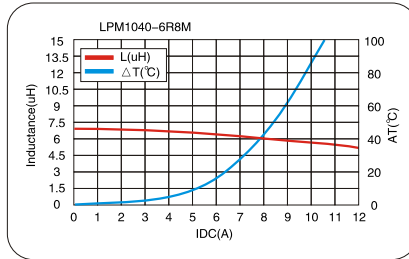
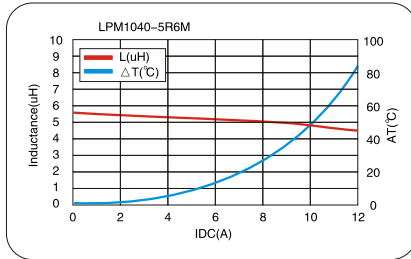
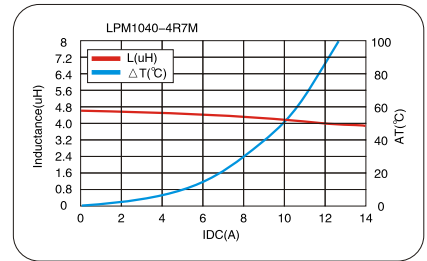
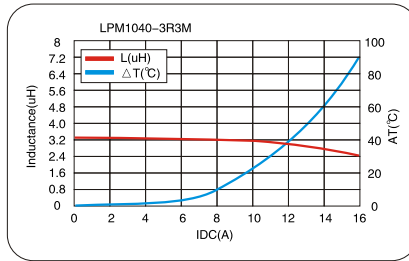
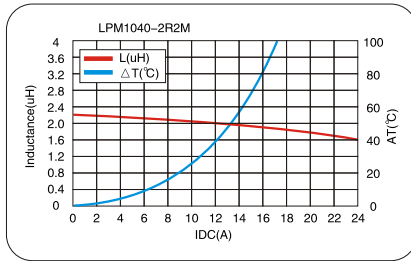


LPM1040 Series

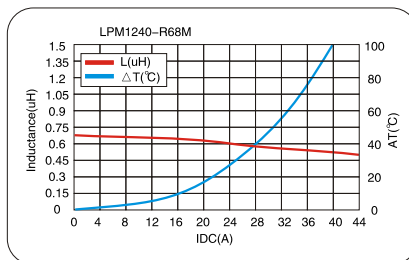
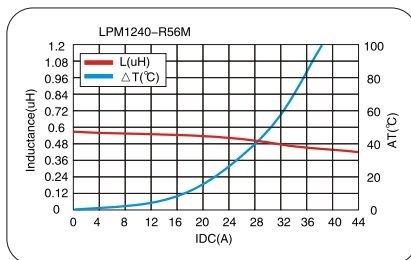
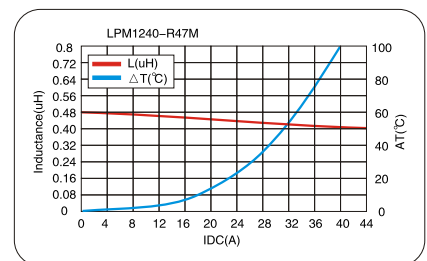
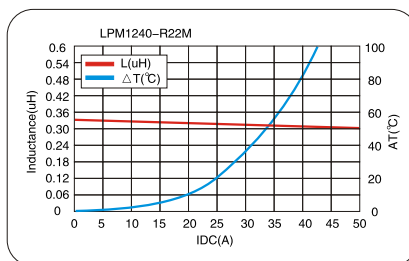
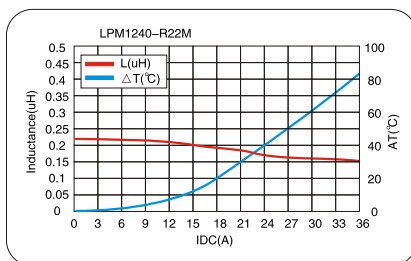


PERFORMANCE CURVE

LPM1040,1045 Series

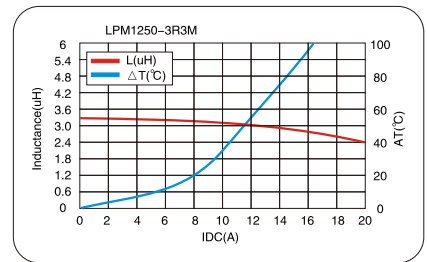
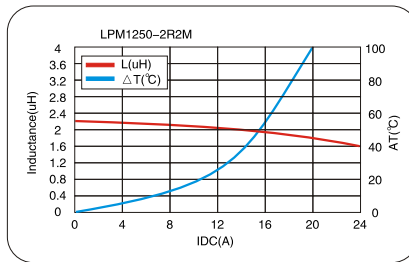
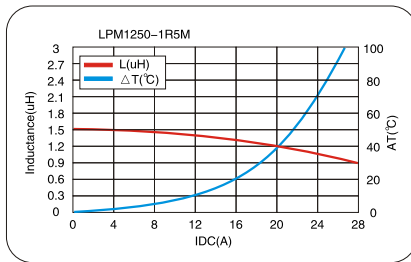
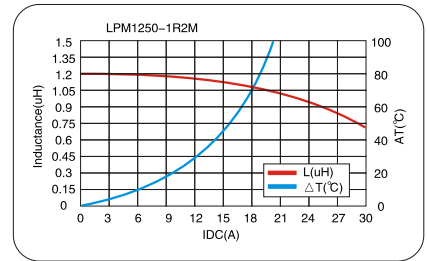
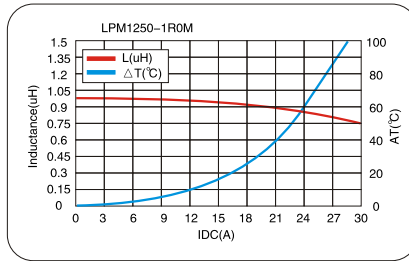
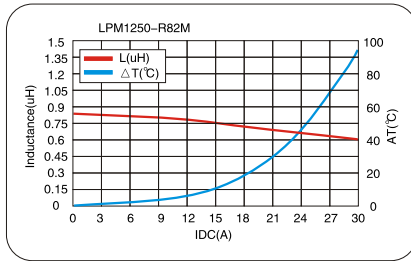


LPM1240 Series

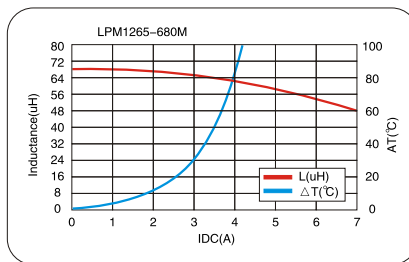
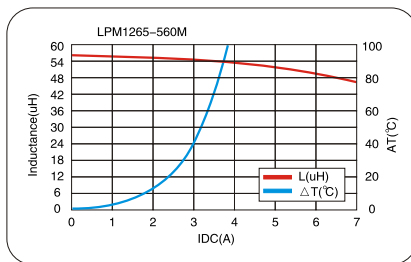
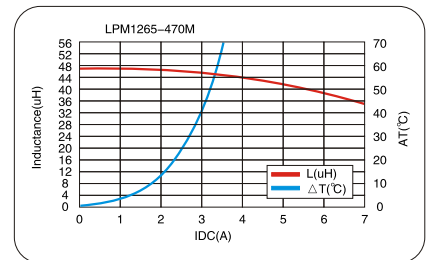
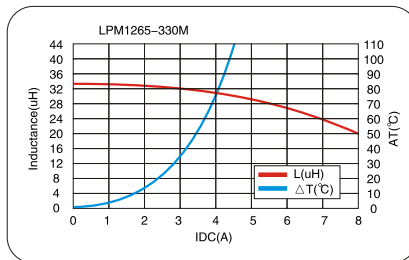
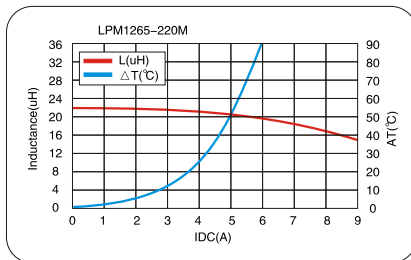
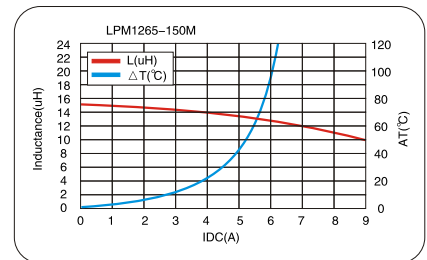
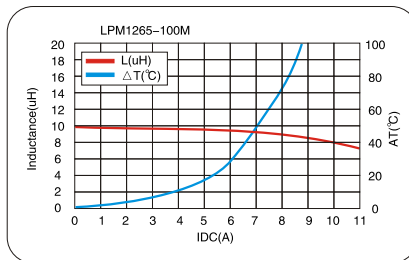
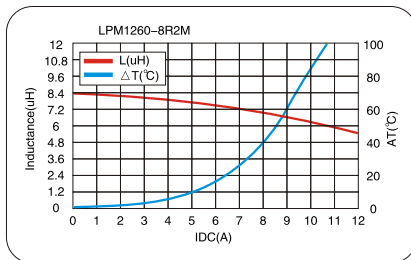
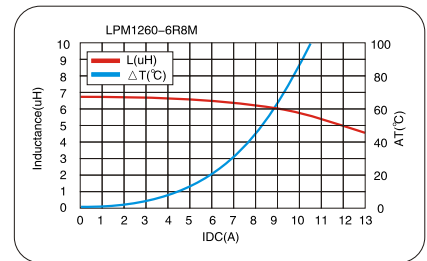
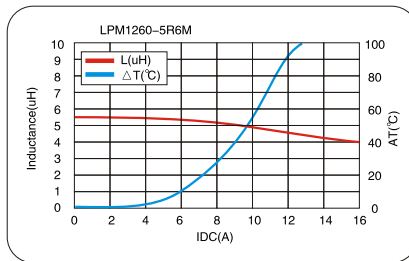
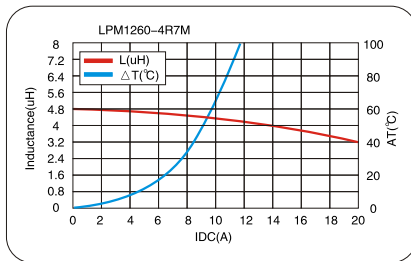


PERFORMANCE CURVE

LPM1250 Series

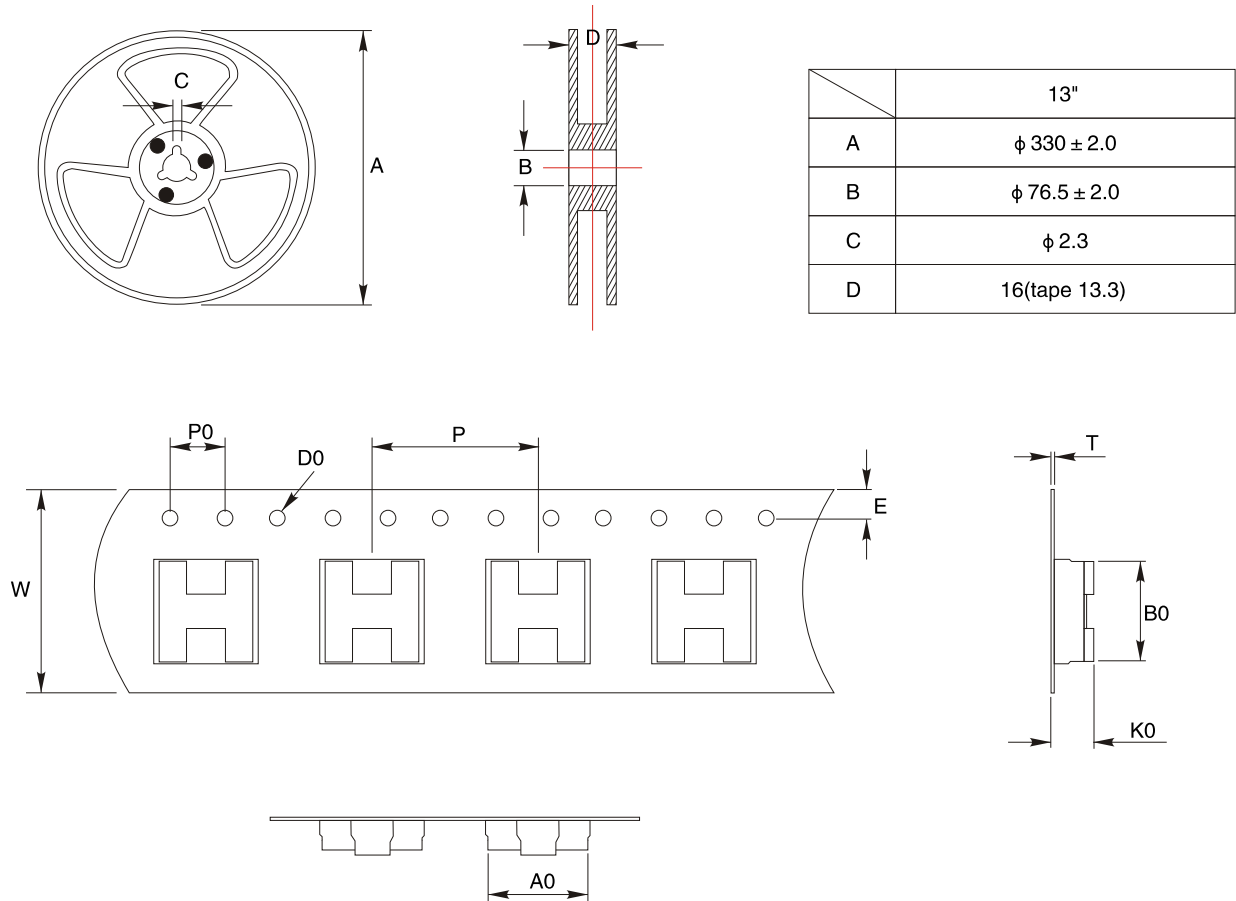


LPM1260,1265 Series

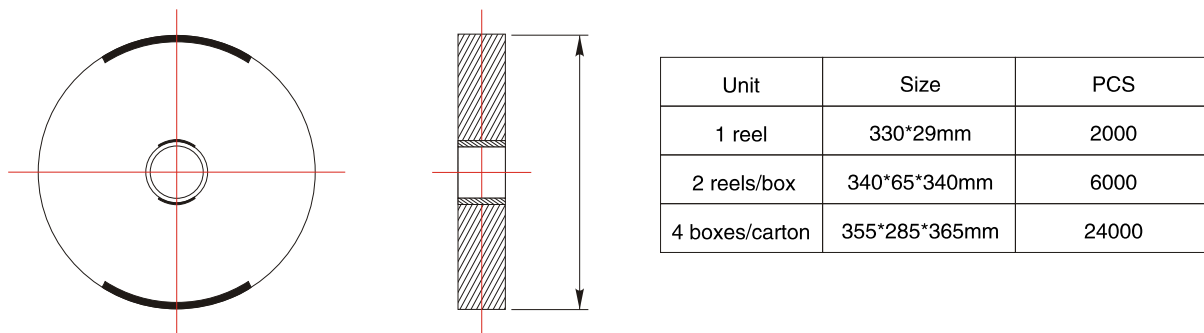


PRODUCT PACKAGING

LPM0630 Series

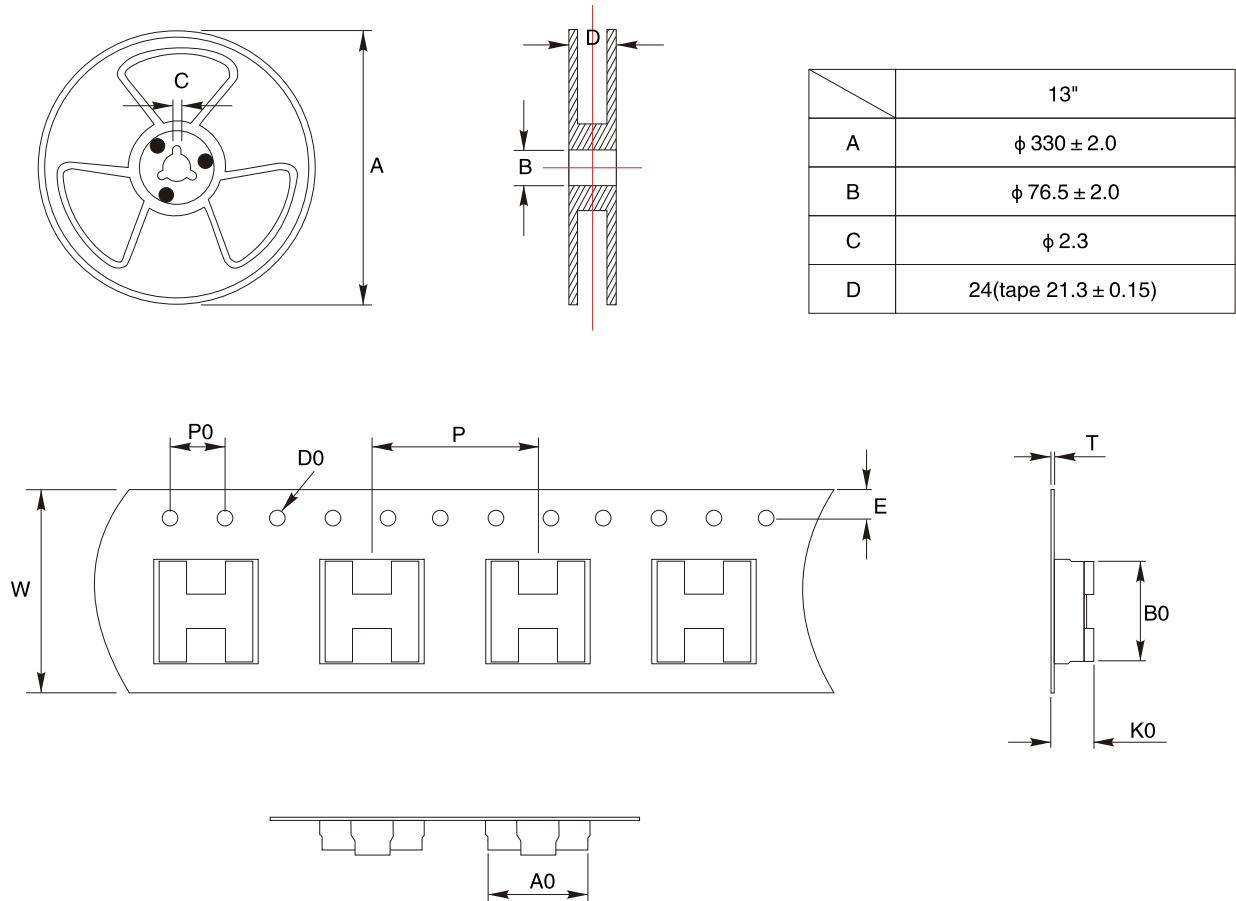


Size	W	A0	B0	D0	E	K0	P0	P	T
0630	16.0 ± 0.3	6.8 ± 0.1	6.8 ± 0.1	1.5 ± 0.1	1.75 ± 0.1	2.8 ± 0.1	4.0 ± 0.1	12.0 ± 0.1	0.4 ± 0.05

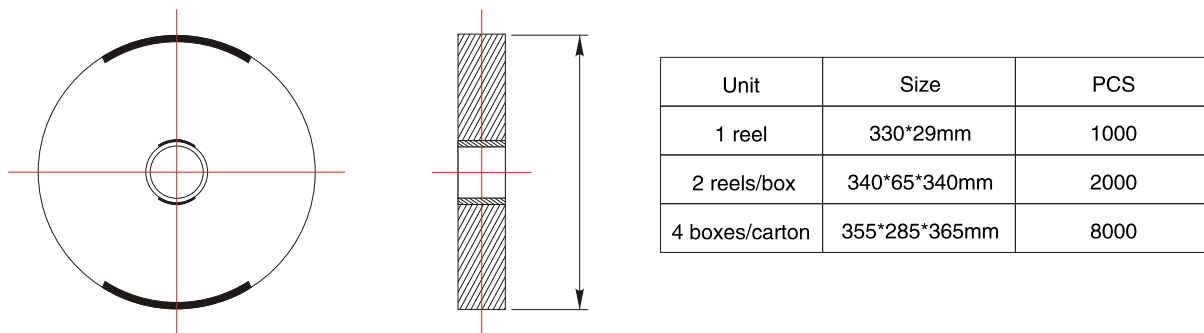


PRODUCT PACKAGING

LPM1040 Series

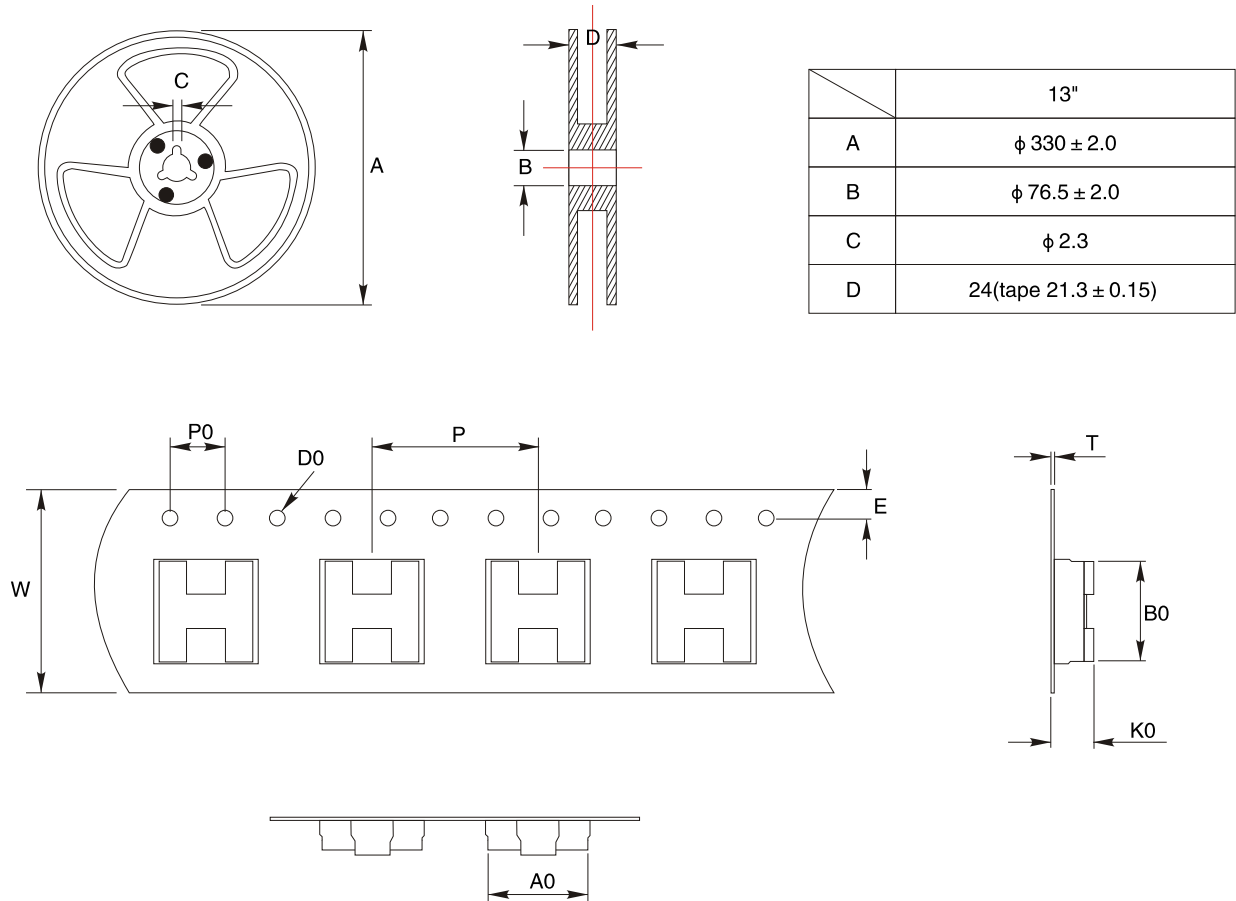


Size	W	A0	B0	D0	E	K0	P0	P	T
1040	24.0 ± 0.3	10.6 ± 0.1	11.6 ± 0.1	1.5 ± 0.1	1.75 ± 0.1	4.2 ± 0.1	4.0 ± 0.1	16.0 ± 0.1	0.4 ± 0.05



PRODUCT PACKAGING

LPM1260 Series



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

